



Minnesota Department
of Administration

PREDESIGN FOR
DAKOTA BUILDING
Faribault, Minnesota

Project No. 78FA0078



October 13, 2021

FINAL REPORT



KLEIN
McCARTHY

ARCHITECTS

PREDESIGN SUBMITTAL FOR:

Minnesota Department of Administration

Dakota Building at MCF Faribault
RECS Project #78FA0078

Faribault, Minnesota

October 13, 2021

I hereby certify that this report was prepared by me or under my direct supervision, and that

I am a duly registered ARCHITECT under the laws of the state of Minnesota.

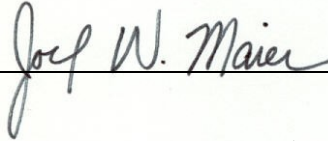
Scott Fettig, AIA



Date: October 13, 2021 Registration Number 22914

I hereby certify that this report was prepared by me or under my direct supervision, and that
I am a duly registered ENGINEER under the laws of the state of Minnesota.

Joel Maier, PE

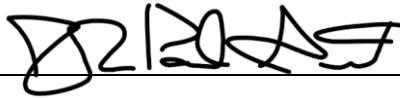


Date: October 13, 2021

Registration Number 19181

I hereby certify that this report was prepared by me or under my direct supervision, and that
I am a duly registered ENGINEER under the laws of the state of Minnesota.

John Paul Gille, PE



Date: October 13, 2021

Registration Number 21476

I hereby certify that this report was prepared by me or under my direct supervision, and that
I am a duly registered ENGINEER under the laws of the state of Minnesota.

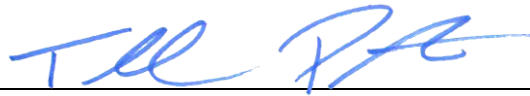
Matthew Armstead, PE



Date: October 13, 2021 Registration Number 46694

I hereby certify that this report was prepared by me or under my direct supervision, and that
I am a duly registered ENGINEER under the laws of the state of Minnesota.

Todd Peterson, PE



Date: October 13, 2021 Registration Number 23427

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The project will include the building demolition of the dilapidated masonry 3,249 GSF two-story portion of the building in its entirety and construct a new single-story structure of 4,383 GSF to provide for replacement of spaces based on the spatial program included in the report. This will provide for the facility's needs and to meet current inmate programming, Americans with Disabilities Act (ADA), American Correctional Association (ACA) standards and technology advancements.

The remaining existing 19,438 GSF single-story Dakota Building to be mostly preserved and will have exterior upgrades including new roofing, fascia, gutters, downspouts, new windows and doors and perimeter drain tile with foundation waterproofing. The site work will include repaving the existing parking and recreation areas, regrading to provide new ADA ramps and sidewalks. The interior upgrades will include internal perimeter drain tile and sump system and finishes maintenance items.

This predesign document has been prepared for the following purposes:

- Identifying all project needs and costs to serve as the basis for funding requests.
- To be the source for future decision making during the development of the project by serving as the road map for future development.
- Provide agency management with the information they need to effectively communicate project details to legislators and stakeholders.
- Communicate essential project objectives with factual data before the actual design process commences or other decisions are made.
- Explore alternatives that had not been previously considered.
- Identify potential cost savings.
- Identify and minimize risks associated with the project.
- Analysis of the best construction delivery method.
- Analysis of funding alternatives best suited for the project.
- Provide a basis for a Request for Proposal (RFP) for design services and in negotiating the future design contract.
- Provides instructions to the future architectural and engineering design firms and provides them the foundation on which to base their design.

SECTION 1.A – Project (Executive) Summary Statement

PROJECT TITLE: Predesign for Dakota Building at MCF Faribault
Location: Faribault, Minnesota

SCOPE

The project will include the building demolition of the dilapidated masonry 3,249 GSF two-story portion of the building in its entirety and construct a new single-story structure of 4,383 GSF to provide for replacement of spaces based on the spatial program included in the report. This will provide for the facility's needs and to meet current inmate programming, Americans with Disabilities Act (ADA), American Correctional Association (ACA) standards and technology advancements.

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COSTS

New Space:	4,383 gsf
Construction Cost:	\$2,155 million
Remodeled Space:	19,438 gsf
Construction Cost:	\$3,132 million
Total Construction Cost:	\$4,378 million
Total Project Cost:	\$7,987 million

FUNDING SOURCE(S)

State Funding Request: \$7,987 million
Sources for Remainder of Funding: None

The State Legislature previously funded \$954,000 for design fees in the 2020 budget process.

This request is for the construction component costs only.

OPERATING COSTS

The staffing quantities remain the same as they currently are for the existing building. No cost decrease or increase is expected.

Although hard to quantify potential maintenance and operating costs, and depending on the B3 requirements deemed necessary for this combination new/remodeled building, we would expect less maintenance costs on the upgraded single-story portion; and significant energy savings on the new addition compared to the old two-story uninsulated portion being demolished.

SCHEDULE

Site Acquisition:	None required
Project Funding:	July 2022
Bidding:	July – August 2022
Award Negotiation:	September – October 2022
Construction:	November 2022 – May 2024
Mid-point of Construction:	July 2023
Close-Out:	June 2024
Occupancy:	July 2024

SECTION 1.B – Project Data Sheet – New Building (or New Work)

Name of Project: Predesign for Dakota Building at MCF Faribault

Agency/Organization: State of Minnesota, Department of Administration

Project/Building Location: 1101 Linden Lane, Faribault, Minnesota 55021

Building Occupancy Type
Primary Space Types: Housing, Programs and Support
Type of Construction: I-B

Building Size
Number of Stories: 1
Square Feet per Floor: First Floor: 23,821 gsf
Total Square Feet: 23,821 gsf
Space Efficiency: Usable v. Circulation/Mechanical, etc. - 62%
Total Building: 248 gsf/resident

Site Size: Number of Acres: 4.5 Acres

Parking: 18 spaces (includes 9 street parking stalls)

Roofing Type: Asphalt shingles on sheathing and wood truss joists.

Exterior Wall Type: Solid wythe masonry walls with brick veneer at the demolished building portion and insulated masonry cavity wall with face brick at the new addition.

1. Predesign Summary

Interior Wall Type: Solid plaster partitions from the original building and stud frame and gypsum at new remodeled walls.

Structural System Type: The existing North Wing will be demolished above the first-floor slab elevation (the first floor supported concrete slab & basement space below will be retained). New construction will consist of continuous concrete footings at the perimeter of the new building which lies outside the existing footprint. The new roof structure will be gabled wood trusses spaced at 24-inches spanning to exterior wood bearing walls. The existing gabled roof profile will be extended north to tie into the new roof.

Structural work at the existing building will consist of new concrete retaining walls at the current ramped openings to the basement on the south & west sides of the building.

Mechanical System Type: Space climate control during the summer via a high efficiency air cooled DX condensing unit matched to the indoor air handler. Space heating during the winter via a hydronic heat exchanger connected to the existing campus wide high-pressure steam system.

Fire Protection Description: Automatic wet type sprinkler system.

Electrical System Type: 208/120 volt 3 phase to feed mechanical loads, lighting, and convenience receptacles.

Technology Systems: The building will be provided with an extension of the existing voice/data system.

Life Expectancy of New Work: 25 - 50 years if properly maintained.

Costs: (Enter costs that are included in the project; if not included, indicate N/A.)

Total Project Cost: \$7,987,468	Furniture, Fixtures, Equipment, Signage: \$31,318
Predesign Cost: \$0	Relocation Cost: N/A
Design Cost (including B-3): \$0	Phasing Cost: Included in Bldg. Cost
Site Acquisition Cost: N/A	SAC/WAC/Permits/Survey: \$150,000
Site Improvements Cost: \$820,000	Building Permit/Plan Review: Included in Building Cost
Parking Structure Cost: N/A	Insurance/Bonds: Included in Building Cost
Building Cost: \$4,634,000	Technology Cost: Included in Building Cost
General Condition's: Included in Bldg. Cost	Commissioning: \$50,000
Surface Parking Cost: Included in Site	Inflation Cost: \$584,000
Construction Contingency: \$463,400	B-3 Construction costs: Included in Building Cost
Owner Contingency: \$738,372	Hazardous Materials Abatement Cost: \$75,000
Project Management Cost: \$55,378	CM Preconstruction Fees: \$50,000
	Construction Management Fees: \$336,000

State Funding Amount: \$7,987,468

Other Funding Source(s) Amount(s): N/A

NOTE: Cost Estimates are based upon the information above.

2. Basis for Need – Project Background Narrative

MISSION

The vision of the Minnesota Department of Corrections is to contribute to a safer Minnesota.

The Mission of the Minnesota Department of Corrections is to reduce recidivism by promoting offender change through proven strategies during safe and secure incarceration followed by effective community supervision.

STRATEGIC PLAN

The current Strategic Plan for the Minnesota Department of Corrections includes the following values and goals.

Department Values

- **Safety:** By supporting a safety-conscious environment for staff and offenders.
- **Research-Supported Practice:** By providing offender programs and interventions based on evidence-based principles.
- **Open and Transparent Communication:** By ensuring that information is shared with staff, offenders and stakeholders.
- **Commitment to Employee Growth and Development:** By fostering employee diversity, collaboration, initiative and opportunities for growth knowing that our strength lies in our skilled and talented employees.
- **Culture of Professionalism:** By committing to a high standard of ethics, behavior and work activities.
- **Organizational Development:** By providing an environment that encourages strong quality results through teamwork, technology, training and process improvement.
- **Collaboration:** By facilitating cooperative interaction with staff and justice partners, building consensus to support our common interest of reducing recidivism.

Department Goals

- Provide effective correctional services
- Hold offenders accountable
- Change offender behavior
- Provide restorative services for victims
- Engage staff and promote workplace safety

OPERATIONAL PLAN

To demolish a two-story portion of the building that has suffered extensive long-term water infiltration damages, and replace it with programming, offices and support functions. The addition and remodeling of the existing one-story building will enable to the State to continue utilizing the facility for housing offenders.

2. Basis for Need – Project Background Narrative

STATUTORY REQUIREMENTS

Meet State statutory requirements, Department of Corrections (DOC) policy and procedures, and American Correctional Association (ACA) operational and physical plant standards for offender housing.

ALTERNATIVE ANALYSIS

Alternative options were explored to identify various methods for dealing with the existing building from renovation to building completely new.

FACILITY CONDITION ASSESSMENT (FCA)

Not applicable.

COMPREHENSIVE/MASTER PLAN

The facility believes the siting and construction character of this proposed building supports the overall vision and intent of the MCF Faribault comprehensive master plan.

SITE SELECTION

The existing one-story building remains with the attached two-story building demolished and replaced with a one-story addition.

HISTORIC DOCUMENTATION

The project is not located in a historic district and does not involve disposal of buildings on the National Register of Historic Places.

DISPOSAL OF STATE-OWNED BUILDINGS

The project involves the partial disposal of State-owned buildings for the demolished two-story building.

STAKEHOLDERS

- The Public
- Minnesota Department of Administration, Real Estate and Construction Services (RECS)
- The Commissioner of Corrections
- Minnesota Department of Corrections – Facilities Division
- MCF-FBT Administration, Operations, Security, Health Services, and Maintenance Staff
- Minnesota County Law Enforcement
- Offenders

IMPACTS

OPERATIONS

The staffing quantities remain the same as they currently are for the existing building. No cost decrease or increase is expected.

Although hard to quantify potential maintenance and operating costs, and depending on the B3 requirements deemed necessary for this combination new/remodeled building, we would expect less maintenance costs on the upgraded single-story portion; and significant energy savings on the new addition compared to the old two-story uninsulated portion being demolished.

OPERATIONAL BUDGET

No cost decrease or increase is expected for staffing.

Costs per Year:

No cost decrease or increase is expected.

The utility cost savings are expected to be significant on the new addition compared to the old two-story uninsulated portion being demolished.

FUNCTIONAL IMPACTS

Since the existing 96 bed unit would remain in place outside of the perimeter fence and the programs being replaced with the new building addition in the same location, movement would continue as it currently does.

Offender crews will be handled much the same as they are currently. Offenders will leave the unit and report to the Laundry where they will meet the crew leader. Upon return to the facility, offenders will return to the Dakota Building at the south entrance where a pat down search will be conducted. After searches are complete the offenders will return to their living unit.

The offenders would have Visiting in the Sierra Building like they currently do.

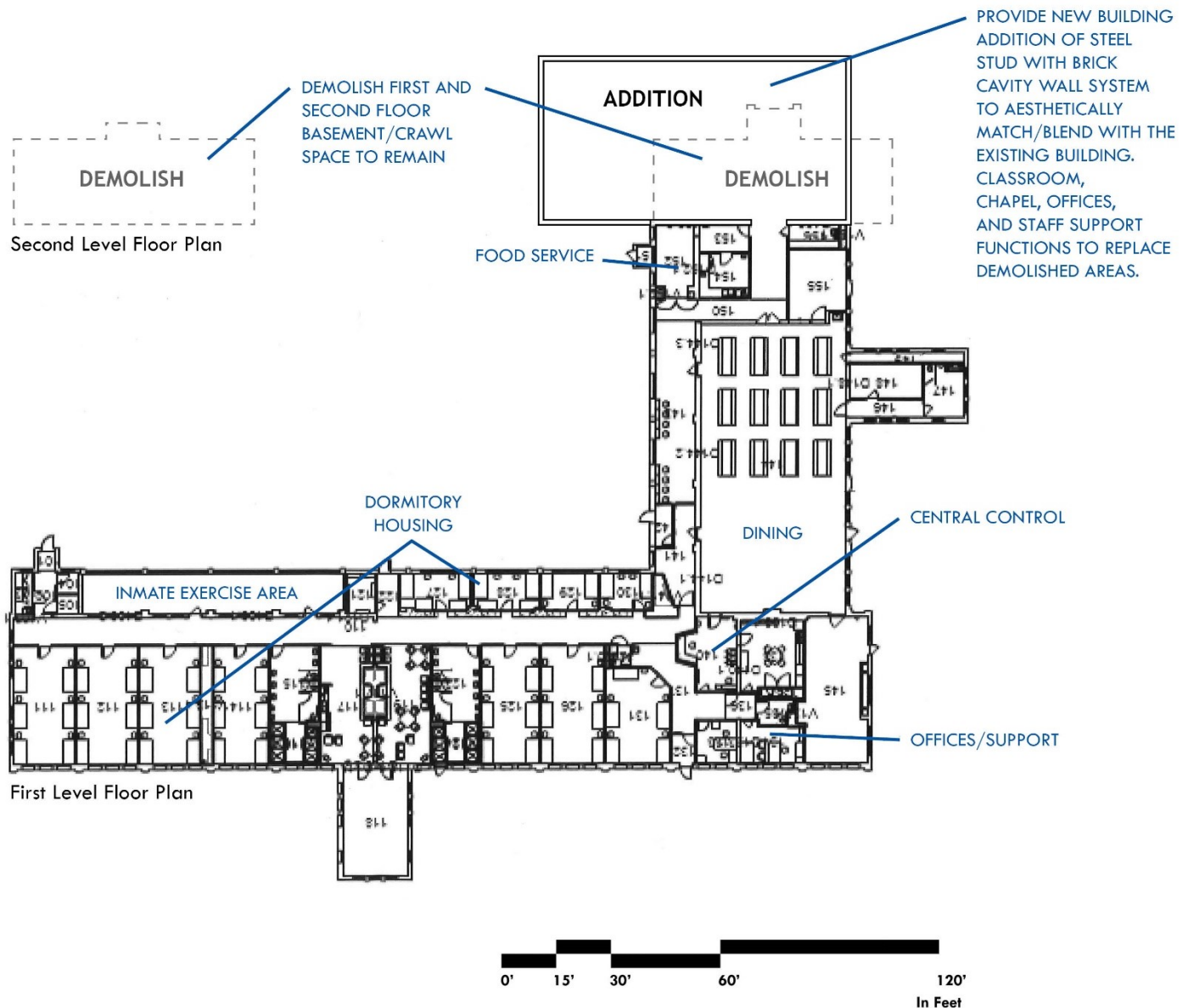
SECTION 4.A – ARCHITECTURAL/ENGINEERING (A/E) PROGRAM

PROGRAM

<u>Space/Area</u>	<u>Size</u>	<u>Remarks</u>
Transition Office	150 sf	
Case Manager Office	150 sf	
Lieutenant Office	150 sf	
Multi-Purpose Room	600 sf	24 inmates x 25 sf/per inmate
Multi-Purpose Storage	30 sf	
Chapel	600 sf	24 inmates x 25 sf/per inmate
Chapel Storage	30 sf	
Laundry	800 sf	4 commercial washers, 4 commercial dryers
IT Room	200 sf	
Toilet – Staff	50 sf	ADA compliant
Toilet – Inmate	<u>50 sf</u>	ADA compliant
Subtotal	2,810 sf	
Grossing factor 35%	<u>954 sf</u>	
Subtotal	3,764 sf	
Major Circulation	365 sf	
Mech/Electrical	<u>365 sf</u>	
Total Addition	4,383 sf	3,249 sf demolished

4. Project Description

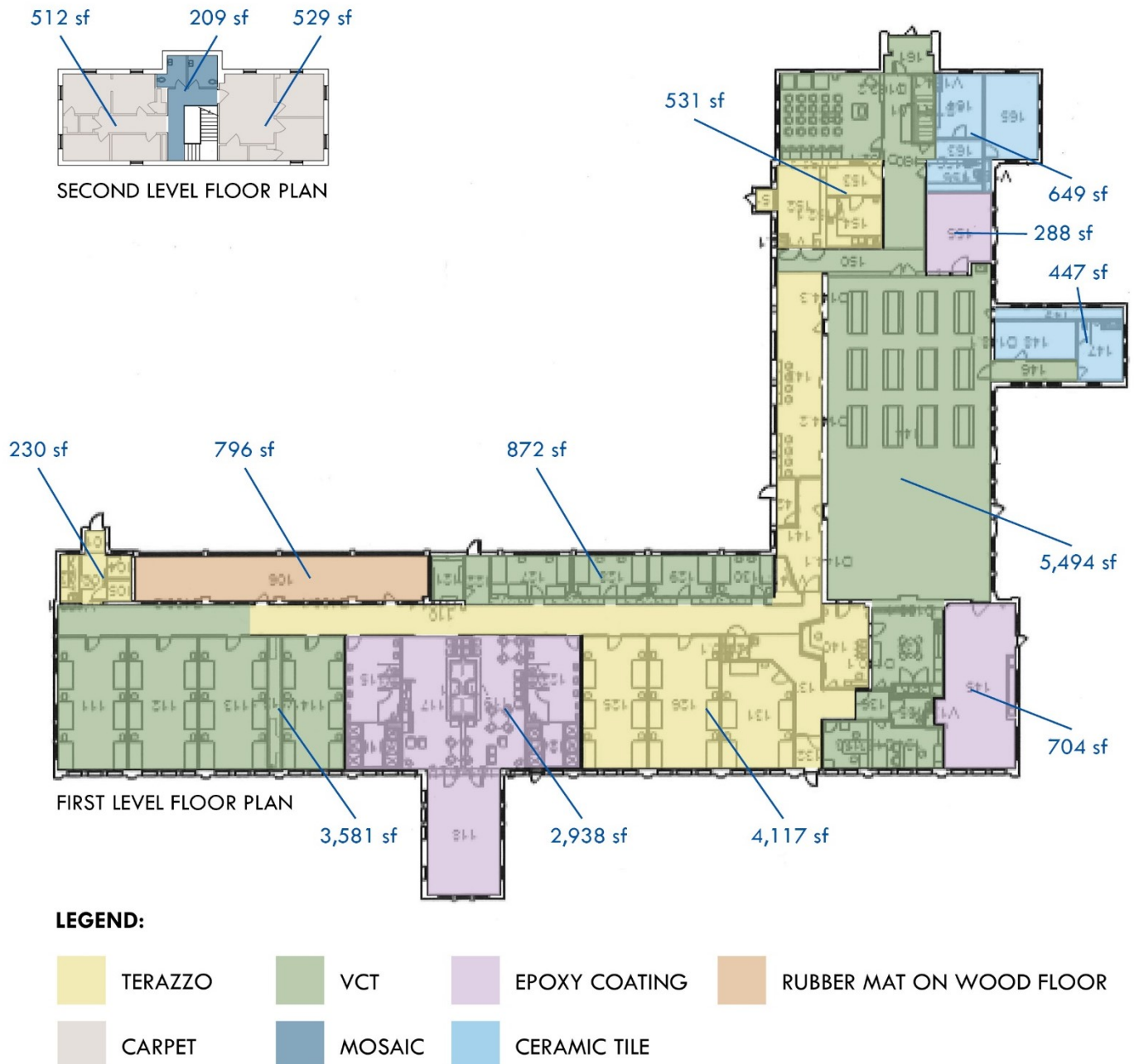
Demolish the dilapidated masonry 3,249 GSF two-story portion of the building in its entirety and construct a new single-story structure of 4,383 GSF to provide for replacement of spaces based on the spatial program included in the report. This will provide for the facility's needs and to meet current inmate programming, Americans with Disabilities Act (ADA), American Correctional Association (ACA) standards and technology advancements.



LEVEL 1 FLOOR PLAN

4. Project Description

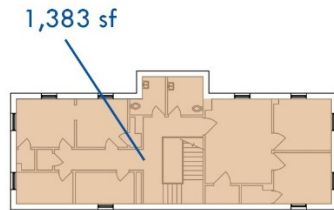
Floor Types:



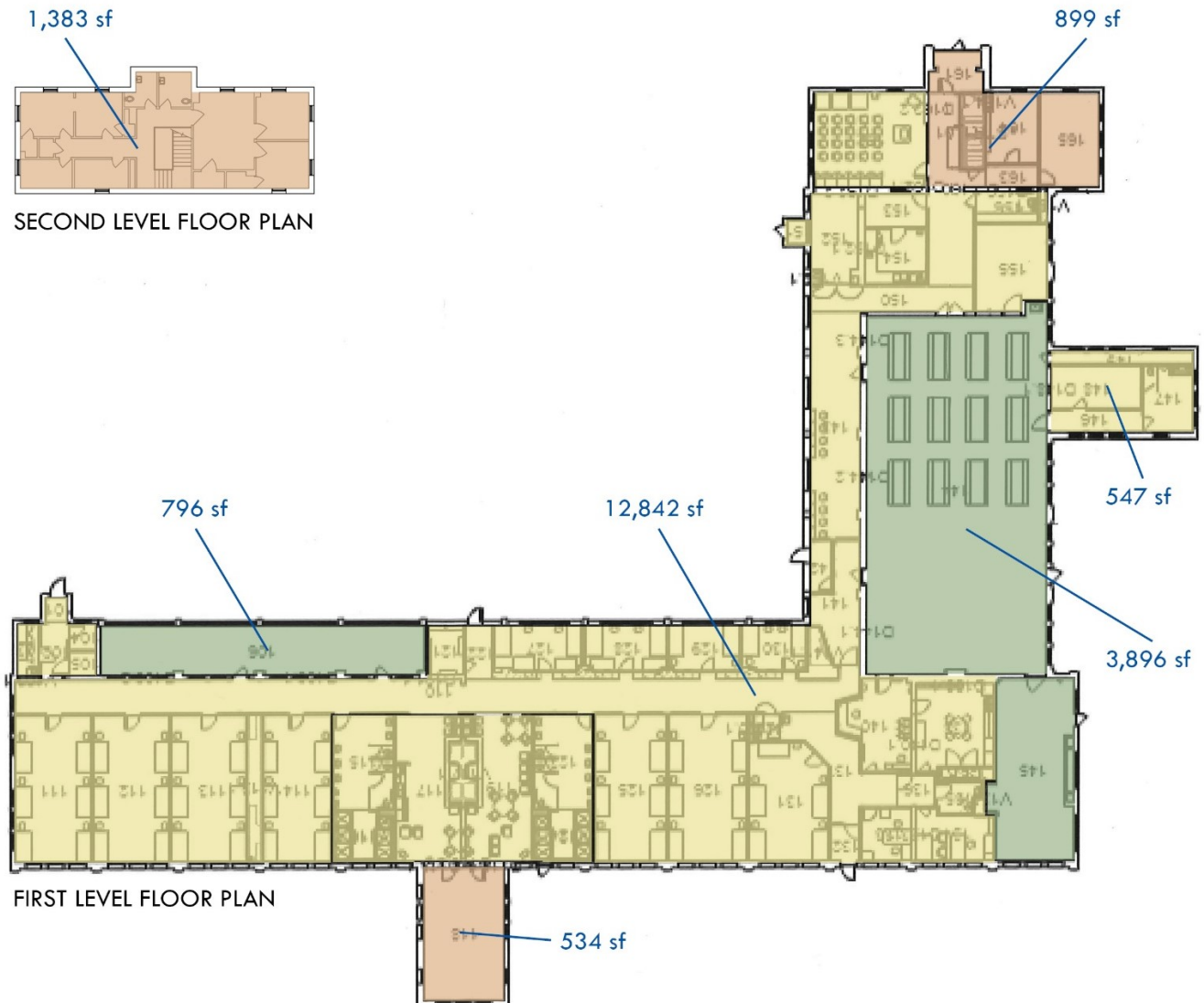
Note: Square footages include area of walls within the calculated area

4. Project Description

Ceiling Types:



SECOND LEVEL FLOOR PLAN



FIRST LEVEL FLOOR PLAN

LEGEND:

 ACT TILES	 EXPOSED CEILING	 PLASTER
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Note: Square footages include area of walls within the calculated area

SECTION 4.B – PRECEDENT STUDIES

The information contained within this Predesign included further development of the Dakota Building Study for the Minnesota Department of Corrections, RECS Project No. 78FA0070 issued June 28, 2019.

Klein McCarthy Architects used the information developed in Predesign For 96-Bed Minimum Housing Unit at MCF – Red Wing, RECS Project No. 78RW0028 revised and issued October 27, 2017. To provide the same comparable 96-Bed minimum security housing facility, the Total Estimated Construction Cost was \$12,214,000 with an estimated Total Project Cost of \$16,199,000 (all costs associated with the project). The Project Cost inflated to the same midpoint of construction as MCF Faribault would be \$27,991,272.

Klein McCarthy Architects also used the information developed in Predesign For 96-Bed Minimum Housing Unit at MCF – Stillwater, RECS Project No. 78SW0048 revised and issued October 30, 2017. To provide the same comparable 96-Bed minimum security housing facility, the Total Estimated Construction Cost was \$10,928,000 with an estimated Total Project Cost of \$14,622,000 (all costs associated with the project). The Project Cost inflated to the same midpoint of construction as MCF Faribault would be \$25,266,276.

Both of the Predesigns at MCF Red Wing and MCF Shakopee contained similar characteristics of 96 beds, programs, and support for new precast constructed facilities. The largest difference was that they were new facilities compared to an addition and remodeling of the MCF Faribault facility at a Project Cost of \$7,987,468.

SECTION 4.C – TECHNOLOGY PLAN AND TELECOMMUTING PLAN



February 4, 2020

Todd Peterson, PE, LEED AP

Ericksen Ellison & Associates, Inc
305 2nd Street NW, Suite 105
New Brighton, MN 55112

Todd,

RE: Information Technology Plans

Project #78FA0071 - MCF Faribault Dakota Building Predesign

Minnesota statutes require state agencies to prepare information technology and telecommuting plans when proposing capital investments in office space. Office space requests include a new building (new construction or acquisition of an existing building), renovation/remodeling and/or relocation. The Office of MN.IT Services is required to review and approve these plans.

I have reviewed the pre-design materials for this project and find your Technology Plans are needing a little adjustment for this project. The building needs technology Modernization. All data cable runs should be dual CAT6 to all locations and should have new copper and fiber run to it from the campus core. We conditionally approve your plan. The goal of the Predesign Approval is to ensure all technology needs for the site are met, and budgeted. As part of the Approval we would like a monthly scheduled meeting to review the progress of the project once it begins. (Via Conference Call or WebEx) In the event you have information that can't be reviewed remotely an in-person meeting should be scheduled. You can arrange the meeting with me anytime.

Minnesota IT Services Reserves the right to rescind its approval if the project changes. Our goal is to make sure the appropriate level of technology is applied to the building, and technology continually changes, therefore we want to be an active part of planning.

If you have any questions concerning this memorandum, or the requirements for these plans, please contact me.

Sincerely,

A handwritten signature in black ink, appearing to read 'Mark Stein', with a long horizontal flourish extending to the right.

Mark Stein

Network Facilities Infrastructure

651-201-1055

Equal Opportunity Employer

SECTION 4.C.1 – TELECOMMUTING PLAN

The facility does not anticipate that telecommuting will be relevant to the staffing of this facility.

SECTION 4.D – SUSTAINABILITY, ENERGY CONSERVATION, AND CARBON EMISSIONS

SUSTAINABILITY AND ENERGY EFFICIENCY

SUSTAINABILITY AND HIGH PERFORMANCE

Minnesota Statute §16B.325 requires that the State's Sustainable Building Guidelines be applied.

Summary: B-3 applies to addition as it is larger than 10,000 GSF. The minor renovations to the existing building are not enough to trigger B-3 as they do not include replacement of the mechanical, ventilation, or cooling systems.

ALTERNATIVE AND RENEWABLE ENERGY

The following are state statutes having requirements for providing alternative and renewable energy sources.

- §16B.32 ENERGY USE
Subdivision 1: Alternative Energy Sources
New construction or a renovation of 50 percent or more of an existing building or its energy systems must include designs which use active and passive solar energy systems, earth sheltered construction, and other alternative energy sources where feasible.

Summary: Renewable energy as mandated by State statutes will be provided for this building.

Subdivision 2: A state agency that prepares a predesign for a new building must consider meeting at least two percent of the energy needs of the building from renewable sources located on the building site defined as solar power or wind power. This two percent will be based on the energy needs for the newly constructed addition as the rest of the building will remain largely untouched.

- §16B.323 SOLAR ENERGY IN STATE BUILDINGS

Solar-thermal:

One of the solar power options is solar water heating. This type of system has solar panels installed and there is a loop of fluid that runs through these solar panels and is heated by the sun. The heat from this fluid is then transferred in a heat exchanger where domestic water is heated for use as a part of the building's plumbing system. This system would have hot water storage and steam-to-water heat exchanger as a supplement heat source when sunlight is unavailable.

Summary: The MCF Faribault facility generates domestic hot water at the central boiler plant utilizing a series of steam-to-water heat exchangers. The Dakota building does not currently have a standalone domestic water heating system, and none is planned on being added as part of this project. The existing campus wide domestic water heating system has more than enough capacity for the new fixtures added as part of this project. As there is no local domestic water heating, adding solar thermal water heating to this building to achieve 2% of the building annual energy usage is not feasible.

Wind:

Wind energy is a form of solar energy. Wind energy (or wind power) describes the process by which wind is used to generate electricity. Wind turbines convert the kinetic energy in the wind into mechanical power. A generator can convert mechanical power into electricity. The relatively small build out area makes wind tower units much larger than needed for 2% savings and also much too costly for our project budget.

Summary: Current equipment costs and utility rates put a simple payback for wind turbine electrical generation for 2% of the building annual energy usage at greater than 90 years. This option is therefore not feasible for this project.

Photovoltaic:

The other option for solar is a photovoltaic system (solar electrical). This system can be installed on the roof of the existing building and be used to provide electricity that is fed into the buildings electrical system reducing the need for electricity purchased from the electric utility.

Summary: Current equipment costs and utility rates put a simple payback for photovoltaic electrical generation for 2% of the building annual energy usage at greater than 50 years. This option is therefore not feasible for this project.

- **§16B.326 HEATING AND COOLING SYSTEMS; STATE-FUNDED BUILDINGS**

The project proposer must include a study for geothermal and solar thermal applications as possible uses for heating or cooling for all building projects subject to a predesign review that receive any state funding for replacement of heating or cooling systems.

Summary: The existing building is heated via steam from the main high-pressure natural gas boilers located at the facility. Rather than providing a new steam-to-water heat exchanger for heating and DX condensing unit for cooling, the systems for the new addition could be replaced with the ground source heat pump system. Building energy modeling of the proposed heating/cooling system vs a ground-source heat pump system indicates an annual savings of ~\$4,000. Based on the estimated cost increase to utilize a ground-source heat pump system, the payback is over 42 years. This option is therefore not feasible for this project.

SECTION 4.E – OPERATIONS AND MAINTENANCE REQUIREMENTS

The staffing quantities remain the same as they currently are for the existing building. No cost decrease or increase is expected.

The utility costs are expected to be slightly higher than the existing building. This is due to the inclusion of dehumidification to the lower level. The increase in energy usage will be offset by longer life for the building and the equipment/piping installed in the lower level.

SECTION 4.F – STATUTE REQUIREMENTS

See Appendix 4b at the end of Section 4 for a table of statute requirements for capital projects that receive state funding and that are applicable to this Project.

SECTION 4.G – SPECIALTY REQUIREMENTS

The following criteria include requirements for the facility space build out.

ARCHITECTURAL

BUILDING STRUCTURE

The existing North Wing will be demolished above the first-floor slab elevation (the first floor supported concrete slab & basement space below will be retained). The new roof structure will be gabled wood trusses spaced at 24-inches spanning to exterior masonry bearing walls. The existing gabled roof profile will be extended north to tie into the new roof.

SOIL CONDITIONS

Soil conditions are assumed to be conducive to a continuous perimeter footing approach. If the project moves forward, the State is advised to retain a geotechnical firm to investigate and confirm the assumption.

FOUNDATIONS

New construction will consist of continuous concrete footings at the perimeter of the new building which lies outside the existing footprint.

SLAB-ON-GRADE

Building floor slabs shall be 4 inch poured concrete slabs-on-grade reinforced with 6" square steel W1.4xW1.4 welded wire fabric or fiber mesh.

EXTERIOR WALLS

The building exterior walls of the new addition shall be comprised of architectural brick veneer cavity wall with masonry backup to match the aesthetic of the existing building.

INTERIOR WALLS

No load bearing interior walls are anticipated. Interior walls shall consist of steel stud walls with abuse-resistant gypsum board sheathing.

BUILDING LATERAL SUPPORT

Lateral load resistance for the addition is provided by exterior concrete masonry shear walls.

BUILDING ENVELOPE

Exterior walls

- Masonry or stone veneer cavity walls
 - 4" face veneer
 - 2" air space
 - 3" extruded polystyrene rigid insulation
 - 8" concrete masonry units
 - Standard or abuse resistant gypsum board

Roof Assemblies

- Roof
 - Gabled wood trusses
 - Blown roof insulation
 - Abuse resistant gypsum board
- Gutters: Prefinished galvanized steel gutters and downspouts.

Exterior Fenestration

- Aluminum entrance and windows
 - Entrances: Kawneer AA 425 aluminum storefront framing
 - Doors: Thermally broken hollow metal doors and frames
 - Windows: Kawneer NX-300 Series Thermal Windows

INTERIORS

Interior Partitions

- Metal stud interior partitions
 - Standard gypsum board at office areas.
 - Abuse-resistant gypsum board at resident areas, corridors, and program areas.
 - Cement board with skim coat at restrooms, and janitor closets.

Interior Openings

- Hollow metal doors and frames
- Flush wood doors
- Door hardware in staff areas
 - Commercial hardware
 - Low-energy automatic door operators at main entrance doors.

- Door hardware in resident areas
 - Commercial hardware
 - Remote electronic monitoring and control

Interior Finishes and Equipment

- Exposed concrete floor with sealer in storage, mechanical and electrical rooms.
- Interior architectural casework
 - Solid surface countertops
 - Plastic laminate cabinets
- Ceramic tile on walls and floors in restrooms and showers (6' height in restrooms).
- Acoustical ceilings in staff areas, multi-purpose rooms and corridors.
- Abuse-resistant gypsum board in laundry and inmate toilet room.
- Structure to remain exposed at mechanical and electrical areas; paint typ.
- Resilient flooring
 - VCT in resident corridors, multi-purpose rooms, laundry and IT area.
 - Vinyl base at all rooms.
- Carpet tile in offices and chapel room.

Exterior Improvements

- Grass seeding throughout disturbed site.
- Landscaping at main building entrance.

CIVIL

DEMOLITION AND REMOVALS

The scope of building demolition will be the removal of the two-story building located on the north side of the east wing of the Dakota Building. The basement of the two-story building will remain since it is a junction point for several mechanical piping systems. The Pawnee Building located to the north of the Dakota Building has already been demolished in its entirety.

The basement of the Dakota Building has a history of groundwater intrusion. Approximately 1,030 lineal feet of perimeter drain tile system trenched in along the outside perimeter of the Dakota Building is proposed. Trenching approximately 10-feet wide will disturb approximately 6 stoops, 165 square feet of existing concrete sidewalk, 6 square yards of bituminous pavement, and 11,500 square feet of turf restoration. The drain tile excavation shall be backfilled with clean coarse sand (less than 50% passing the No. 40 sieve and less than 5% passing the No. 200 sieve). We estimate approximately 860 cubic yards of granular backfill will be required for the perimeter drain tile system.

The basement floor of the existing building and the basement of the two-story building will need to be removed for an under slab drain tile system. BKBM anticipates 3-rows of under slab drain tile pipe that is spaced at approximately 20-feet apart be placed under the basement floor slab. 12-inches of clean crushed $\frac{3}{4}$ -inch drainage rock, geotextile separation fabric, granular sand cushion, and a vapor barrier shall be placed prior to pouring a new basement floor slab.

4. Project Description

Other site demolition will include approximately 230 square feet of concrete retaining wall removal and approximately 860 sq. ft. of concrete pavement removal at the sloped ramps to the basement. Approximately 440 sq. ft of existing concrete sidewalk will need to be removed so that a new 830 sq. ft. ADA code compliant sidewalk can be constructed from the parking lot to the southeast ingress/egress door.

All debris is to be hauled offsite for disposal or sorted and recycled. All voids are to be filled and compacted with granular borrow, graded, and furnished with sod.

EARTHWORK, EXCAVATION AND GRADING

Erosion control silt fence or bio log sediment control devices are to be installed around the perimeter of the proposed scope of work to limit sediment from leaving the site and to fulfill NPDES permit requirements. The two existing ramps that access the basement will be removed and backfilled with clean coarse sand (less than 50% passing the No. 40 sieve and less than 5% passing the No. 200 sieve) that is suitable as backfill against the basement foundation wall. We estimate approximately 100 cubic yards of backfill material will be required. This is the same material used as backfill along the perimeter foundation drain tile system.

Existing topsoil within the grading limits encompassing the building and any service drives, sidewalks, and utility installations shall be removed and stockpiled for later use. Exterior finished grading will be required around the new building area, perimeter drain tile excavation, and paved areas. Excavations will be required for footings and foundations, and any direct-bury utilities for the proposed building addition. All fill areas will require either imported granular borrow or soil salvaged from site grading activities if approved by the Geotechnical Engineer. The stockpiled topsoil may be utilized for finish grading. Disturbed areas are to have 6" of topsoil placed and be furnished with sod.

CONCRETE AND BITUMINOUS PAVING

Concrete sidewalks disturbed due to perimeter drain tile trenching will be restored. A new ADA code compliant sidewalk will also be constructed. Concrete sidewalks connecting the proposed entrances and exits are to be 4" of concrete over 4 inches of Class 5 aggregate base. Approximately 1,115 square feet of concrete sidewalk is anticipated.

A new 7-inch thick by 80-foot long concrete valley gutter across the driveway into the parking lot is needed. Lilac Lane drains from northwest to southeast, but the grades in the east gutter of the road and driveway intersection are flat. Ponding currently occurs at this location and the bituminous pavement is showing signs of distress due to ponded water. A new valley gutter placed across the intersection will provide better drainage of this intersection and carry stormwater runoff to the south.

The driveway, parking lot, basketball court, and the restoration of disturbed bituminous paved roadways, likely due to utility trenching, will be repaved with a pavement section consisting of two courses of 1.5-inch thick bituminous pavement (3-inches of bituminous pavement) over 8-inches of Class 5 aggregate base. Approximately 2,800 square yards of new bituminous pavement is required.

SITE UTILITIES

The new building addition will need to investigate potential utility conflicts for natural gas, sewers, domestic water, electrical, low voltage telephone/data and security lines. It is our understanding that new utilities will be direct buried. Removal and relocation of such existing utilities will require careful consideration of how services are maintained to surrounding buildings during construction, and how to provide new permanent infrastructure connections to the new and existing buildings. It is anticipated that new sanitary sewer and water service for the new building addition can be extended from the existing Dakota Building.

To the best of our knowledge storm sewer does not exist within the site. Stormwater runoff generally sheet flows to the southeast. An existing infiltration or filtration stormwater management pond is located south of the site that at least a portion of this site drains to. The remaining site drains to Lilac Lane. It is unclear as to whether Lilac Lane also outlets to this existing pond.

Based on a CAD map of the site, an existing 10-inch steam, 5-inch condensate, 5-inch hot water, and a 3-inch cold water run through the basement of the building to be demolished and the existing Dakota Building. It is our understanding that the basement area that currently exists will remain.

With the removal of the Pawnee Building and the two basement ramps, it is anticipated that the square feet of proposed impervious of the site will not likely exceed existing conditions. Still, the site's stormwater runoff for the new improvements will need to meet MN B3 requirements. B3 stormwater requirements includes rate controlling the 2-year and 10-year events to pre-settlement conditions and the 100-year event to existing conditions. The site must also allow for retention of the 1.1-inch rain event, resulting in no runoff from the site. Also required is the site treat the 2-year 24-hour rain event for 80% total suspended solids reduction and 60% total phosphorous reduction. This will likely be achieved through infiltration/filtration.

Additional requirements for stormwater management will need to be verified with the local authorities having jurisdiction, although it is likely MN B3 requirements are more stringent than local regulations. For the purposes of this study, it is assumed that all roof drainage will be directed through roof gutters and downspouts. It is anticipated that overland flow will be directed toward Lilac Lane and into the existing infiltration/filtration pond located south of the site.

MECHANICAL

DEMOLITIONS AND REMOVALS

The scope of building demolition will include the removal of the two-story portion of the Dakota building. The lower level of this area will remain undisturbed as it serves as a junction point for multiple mechanical piping systems that serve the remainder of the facility.

All of the domestic water piping, sanitary sewer piping, hydronic supply/return piping, and steam/condensate piping serving the existing two-story portion of the building will be demolished back to the appropriate mains and capped. All of the plumbing fixtures within the two-story portion of the building will be demolished. The ductwork, diffusers, VAV boxes and associated controls within the two-story portion of the building will be demolished. The air handler serving this space (AHU-3) will remain in place as it is in another part of the Dakota building that will not be demolished.

4. Project Description

Within the lower level of the entire building, all of the insulation shall be removed from the remaining domestic hot/cold water piping, hydronic supply and return piping, and the steam/condensate piping. Over the years, moisture has collected in the insulation and ruined it.

FIRE PROTECTION

The new addition to the building will be provided with fire protection in all spaces in the form of a wet type sprinkler system. The existing fire suppression system will be extended to provide this service.

The existing fire suppression system serving the work-out room will be modified to accommodate the remodeling of that space. Due to the potential for low temperatures in the work-out room, the heads serving this area will be dry type heads to prevent freezing.

For all other spaces, the piping will remain full of water. Fully concealed type fire sprinkler heads with white disc covers will be installed in rooms with ceilings. Brass upright pendant type fire sprinkler heads will be installed in rooms without ceilings (equipment rooms). Tamper-resistant institutional style heads will be used in inmate areas with low ceilings.

Piping will be black steel. Pipes 2" and smaller will be schedule 40 thickness, and larger pipes will be schedule 10. The fire sprinkler system is required to meet applicable codes (NFPA 13, and the Minnesota Fire Code) and local rules and regulations.

PLUMBING

The existing domestic hot and cold-water systems will be extended to provide service to the new plumbing fixtures in the new building addition. Most of this piping will be routed in the lower level of the building. The inmate restrooms will be provided with stainless steel security style toilets, urinals, and lavatories. Security style fixtures will be automatic hands-free style. Staff restrooms will be fitted with porcelain toilets and lavatories. Staff fixtures will be automatic hands-free style. A mop sink will be provided in the janitor closet. Floor drains will be provided throughout the building where water is used, or extensive cleaning/cleanup will be needed. Low flow fixtures will be used where practical.

The existing sanitary sewer piping serving the existing shower rooms will be modified to increase the slope and improve drainage flow. This piping is exposed in the lower level of the building.

Two new 3" floor drains and associated venting will be added to the existing kitchen spaces.

All of the existing domestic hot, cold, and recirculation piping within the lower level of the building will be reinsulated and relabeled. All of this insulation will be flexible elastomeric (Armaflex) to prevent future issues with wet insulation.

Under work of others, a new drain tile system will be installed underground in the lower level of the building to collect ground water for removal. The mechanical contractor will provide a new duplex pump and sump system in the lower level of the building to remove this water. The pumps will be capable of approximately 50 gpm each and be fully redundant. A new 450-gallon fiberglass sump will be provided for collection of the ground water. The pumps will be provided with a control panel that will be integrated into the facility wide building automation system.

4. Project Description

All new sanitary waste and vent piping shall be cast iron. All new domestic water piping shall be copper. All plumbing systems will be designed to meet the current version of the Minnesota Plumbing Code and the SB2030 requirements for water conservation.

HVAC

The new building addition will be climate controlled during the summer to maintain an indoor temperature range between 75 and 78°F with a maximum relative humidity of 58% RH. During the heating season the new building addition will maintain an indoor temperature range between 72 and 76°F. Humidity will not be controlled during the heating season (no humidifiers will be provided). The mechanical system will be designed to limit ambient sound levels to NC 35 in the occupied areas. The minimum outdoor air intake will be in accordance with ASHRAE 62.1. The indoors will be slightly pressurized compared to the outdoor to keep infiltration to a minimum.

Within a mechanical room a pair of redundant steam-to-water heat exchangers will convert steam provided by a facility wide system into hot water for heating. Each heater would have an output capacity of 100 MBH. One heat exchanger will be fully redundant. The hydronic heating system will be variable volume with redundant pumps to circulate heating water throughout the building addition.

A single variable volume air handler (approximately 5,000 cfm) will be installed within a mechanical room to provide heating and ventilation to the spaces through downstream VAV boxes with booster heating coils. This air handler will utilize hydronic hot water for heating and DX for cooling. A new 10-ton condensing unit will be installed on grade near the new mechanical room. Refrigerant piping will link the new condensing unit with the new air handler. Ductwork will extend up through the roof for intake and relief air.

All of the restrooms and janitor closets will be provided with exhaust as required by code. Exhaust will be accomplished via exhaust fan(s) located on the roof.

A new variable volume dedicated outside air unit will be provided for ventilation and dehumidification of the entire lower level of the existing building. The unit will be capable of bringing in 100% outside air and discharging it to the space at 55°F during the heating season. The unit will have a sensible only energy recovery section to ensure code compliance and save energy. The unit will be capable of approximately 10,000 cfm. A system of ductwork will be installed throughout the lower level to ensure even distribution of supply and return air. This dedicated outside air unit will utilize hydronic hot water for heating. Ductwork will extend to new louvers in the outside wall for intake and relief. To ensure that dehumidification can happen year-round, dehumidifiers will be added to the lower level. Six indoor commercial dehumidification units each capable of removing 165 pints of water per day each (Quest Dual 165 or similar) will be installed throughout the lower level. Condensate discharge from these units will be routed to sanitary sewer.

Two new hydronic unit heaters each capable of approximately 12 MBH will be provided to heat the remodeled work out space. These units will be connected to the existing hydronic supply and return systems in the building. A new sensible only energy recovery unit will be installed to provide the code required ventilation for this space. This unit will be capable of providing approximately 300 cfm to the space year-round. A hydronic coil will be provided in this unit to ensure discharge air temperatures of 75°F during the heating season.

All of the existing steam, condensate and hydronic piping within the lower level of the building will be reinsulated and relabeled. Insulation on the hydronic piping will be flexible elastomeric (Armaflex) to prevent future issues with wet insulation. Insulation on the steam and condensate piping will be fiberglass with a full pvc jacket to limit future issues with wet insulation.

All HVAC systems will be designed to meet the current versions of the Minnesota Mechanical Code, Minnesota Energy Code, and the SB2030 requirements for energy conservation.

BUILDING AUTOMATION & METERING

The existing facility wide building automation system will be extended to the new building to provide control and monitoring of the new equipment. The automation system will also include metering of the energy usage systems to meet the SB2030 requirements. This metering will include domestic cold water, domestic hot water, steam/condensate, and electricity.

ELECTRICAL

POWER DISTRIBUTION

The existing electrical service is in good condition. The service has adequate capacity for current and planned loads. Most of the building panelboards are in good condition and will remain. There are two existing panelboards located on the wall common with the two-story portion of the building. These panelboards must be removed to demolish the two-story portion and new panel boards will be installed in the new addition and connected to the existing building service.

The new addition will have receptacles installed throughout the addition and be connected to the new panelboards.

EMERGENCY POWER

The existing emergency generator G6 located near the Power Plant building provides code required emergency power to the Dakota Building and a few other buildings. This system is in good condition and will remain. Existing ATS and emergency panelboards in the building will remain. New emergency circuits will be installed in the new addition to power emergency lights.

LIGHTING

Lighting in the existing building is adequate and in good condition. Some lighting will need to be replaced in the Inmate exercise area to allow for insulation. New LED lighting will be provided in the new addition with light levels per current IESNA guidelines. New lighting controls in compliance with current Minnesota Energy Code and facility security requirements will be provided.

FIRE ALARM SYSTEM

The existing Siemens fire alarm panel will remain, and new detectors and notification devices will be provided per code in the new addition.

VOICE/DATA SYSTEM

Existing building is connected to the campus with copper and multi-mode fiber optic cables. The fiber optic infrastructure will be upgraded with 48 strands of single mode fiber optic cable installed in the existing underground conduit and tunnel system back to the Birch Building. Install and terminate at the building main communications room. Provide 24 strands of single mode fiber between the main communications room and new IT room in the addition. Room shall contain equipment rack with fiber optic patch panel and cat 6 patch panel to feed addition. New horizontal category 6 cable will be installed from the new IT room to voice and data outlet located in the new addition. Provide 2 runs of cable to each outlet in all offices, conference rooms, activity rooms, etc.

SECURITY SYSTEMS

The existing building camera system and Genetec recording system will remain. New cameras will be provided throughout the new addition. Cameras in the inmate exercise area will be relocated to allow for new insulation.

ALTERNATIVE & RENEWABLE ENERGY

Subdivision 1: This project does not involve remodeling of an existing building, so this does not apply.

Subdivision 2:

General: Using a detailed energy modeling software, the predicted annual energy consumption for newly added portion of the building is 284,679,000 BTU/yr., 2% of this is 5,693,000 BTU/yr., which equates to 1,669 kwh/yr.

Solar Thermal:

The MCF Faribault facility generates domestic hot water at the central boiler plant utilizing a series of steam-to-water heat exchangers. The Dakota building does not currently have a standalone domestic water heating system, and none is planned on being added as part of this project. The existing campus wide domestic water heating system has more than enough capacity for the new fixtures added as part of this project. As there is no local domestic water heating, adding solar thermal water heating to this building to achieve 2% of the building annual energy usage is not feasible.

Wind: Given the location of the facility in a river valley and backed up to a bluff, we would question if the site is even a candidate for wind energy production. No wind study has been done on this site to our knowledge. Given the above factors and industry trends that wind energy for this type of site has a worse payback than other types of renewable energy, it is determined that wind energy is not practical for this site.

Photovoltaic: The proposed building would receive its electricity from the existing campus electrical system. Using PV Watts, a photovoltaic energy estimating program, we calculate that a 2 KW photovoltaic array would be needed to produce 1,700 kwh per year. The total cost of this system is estimated to be about \$17,500. The cost of electrical energy is \$0.09 per kwh; therefore, the estimated annual savings are \$309 per year. The payback is 56 years. This option is therefore not feasible for this project.

4. Project Description

Geothermal: A ground-source heat pump system could be made useful by generating heating and cooling energy in place of the system above (existing campus steam system/DX condensing unit). The system would consist of an earth heat exchanger (well field), an indoor water-to-water heat pump, circulating pumps, and piping. The airside portions of the systems would remain as described above. The overall estimated system cost (including the cost of soil testing) would be approximately \$171,000 more than the existing campus steam system/DX condensing unit system. Based on detailed energy modeling of the boiler/chiller system vs a ground-source heat pump system indicates an approximate annual savings of \$4000. Based on the estimated cost increase to utilize a ground-source heat pump system, the payback is 42.75 years. This option is therefore not feasible for this project.

Summary:

Alternate Energy Source	% of Annual Energy	Probable Cost (\$)	Annual Savings (\$)	Payback Period (Years)
Geothermal	2%	\$171,000	\$4,00	42.75
Photovoltaic	2%	\$17,500	\$309	56
Solar Thermal	N/A	N/A	N/A	N/A
Wind	N/A	N/A	N/A	N/A

4. Project Description

FURNITURE, FIXTURES, AND EQUIPMENT (FF&E)

The program furnishings, office furniture, workstations, tables, chairs, file cabinets and other office furnishings will be directly purchased by the Facility through MINNCOR but funded within the project.

MCF Faribault Dakota Building

Lt. Office				
Desk	24x60 fixed	2	\$ 400	\$ 800
Pedestal Files		2	\$ 260	\$ 520
desk Chair		1	\$ 600	\$ 600
side chairs		2	\$ 240	\$ 480
				\$ 2,400
Case Manager office				
desk	24x60	2	\$ 400	\$ 800
Pedestal files		2	\$ 260	\$ 520
chair		1	\$ 600	\$ 600
side chairs		2	\$ 240	\$ 480
				\$ 2,400
Transitions office				
desk	24x60	2	\$ 400	\$ 800
Pedestal files		2	\$ 260	\$ 520
chair		1	\$ 600	\$ 600
side chairs		2	\$ 240	\$ 480
				\$ 2,400
Multi Purpose Room				
24x60 tables		12	\$ 301	\$ 3,612
chairs		24	\$ 240	\$ 5,760
				\$ 9,372
Chapel				
chairs		24	\$ 180	\$ 4,320
podium/wood		1	\$ 500	\$ 500
				\$ 4,820
Grand total				\$ 21,392

Note: FF&E escalated to 2021 cost of \$24,600

FF&E Budget by MINNCOR	\$24,600
Design Contingency at 15%	\$ 3,690
Subtotal	\$28,291
Midpoint of Construction Inflation at 10.7%	\$ 3,027
Total FF&E	\$31,318

SECTION 4.H – PROJECT PROCUREMENT AND DELIVERY

The method used for delivering the project will be the Construction Manager at Risk (CMAR) and the CMAR to be on site to manage the project.

All product specifications will be written to allow multiple manufacturers and suppliers to competitively bid the products. No single product or single source will be specified unless formal prior justification and approval was received.

SECTION 4.I – PROJECT DESIGN SERVICES AND ADDITIONAL OWNER COSTS

See Appendix 6 for a comprehensive list of possible design and soft costs that are included for the proposed project.

SECTION 4.J – QUALITY CONTROL PLAN

Along with the code required testing, the Project included the following quality control measures that were incorporated into the project delivery process for the project:

- Specified submittals of quality control plans by the contractors and subcontractors.
- Building Information Modeling (BIM) for clash detection.
- BIM interface with Archibus.

Section 4 APPENDICES FOLLOW THIS SECTION

APPENDIX 4a – Space Needs Inventory Forms

APPENDIX 4b – Applicable Statutes for State Funded Projects

APPENDIX 4a – SPACE NEEDS INVENTORY

Room/ Space Name: Transition Office

Number of Spaces in program: 1

Square Foot Area: 150 sq. ft.

Function: Office

Adjacencies: Staff Toilet, Case Manager Office, & Lieutenant Office

Furniture, Fixtures, & Equipment: Desk, Chair, & Computer

Architectural Finishes

Flooring: Carpet

Wall Material: Gypsum Board

Ceiling: Acoustical Ceiling Tile

Lighting: LED Fixture

Wall Base: Vinyl

Wall Finish: Paint

Ceiling Height: 9'-0"

Special Criteria: N/A

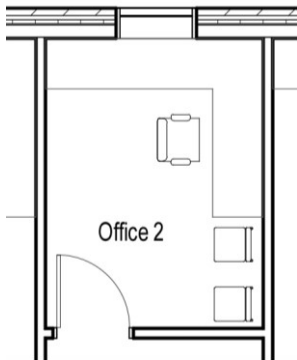
Mechanical/ HVAC/ Piping Requirements: See Section 4.G Mechanical Article

Electrical Requirements: See Section 4.G Electrical Article

Technology Requirements: See Section 4.C Technology Plan and Telecommuting Plan & Section 4.G Technology Article

Security Requirements: See Section 4.G Security Article

Room Layout Diagram: 1/8" = 1'-0"



Adjacency Layout Diagram: See Appendix 4c Adjacency Diagram

APPENDIX 4a – SPACE NEEDS INVENTORY

Room/ Space Name: Case Manager Office

Number of Spaces in program: 1

Square Foot Area: 150 sq. ft.

Function: Office

Adjacencies: Staff Toilet, Transition Office, & Lieutenant Office

Furniture, Fixtures, & Equipment: Desk, Chair, & Computer

Architectural Finishes

Flooring: Carpet

Wall Material: Gypsum Board

Ceiling: Acoustical Ceiling Tile

Lighting: LED Fixture

Wall Base: Vinyl

Wall Finish: Paint

Ceiling Height: 9'-0"

Special Criteria: N/A

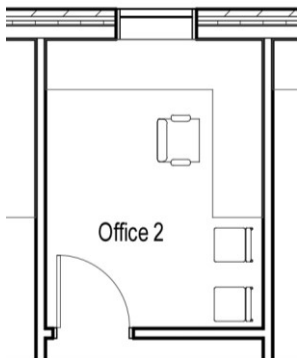
Mechanical/ HVAC/ Piping Requirements: See Section 4.G Mechanical Article

Electrical Requirements: See Section 4.G Electrical Article

Technology Requirements: See Section 4.C Technology Plan and Telecommuting Plan & Section 4.G Technology Article

Security Requirements: See Section 4.G Security Article

Room Layout Diagram: 1/8" = 1'-0"



Adjacency Layout Diagram: See Appendix 4c Adjacency Diagram

APPENDIX 4a – SPACE NEEDS INVENTORY

Room/ Space Name: Lieutenant Office

Number of Spaces in program: 1

Square Foot Area: 150 sq. ft.

Function: Office

Adjacencies: Staff Toilet, Transition Office, & Case Manager Office

Furniture, Fixtures, & Equipment: Desk, Chair, & Computer

Architectural Finishes

Flooring: Carpet

Wall Material: Gypsum Board

Ceiling: Acoustical Ceiling Tile

Lighting: LED Fixture

Wall Base: Vinyl

Wall Finish: Paint

Ceiling Height: 9'-0"

Special Criteria: N/A

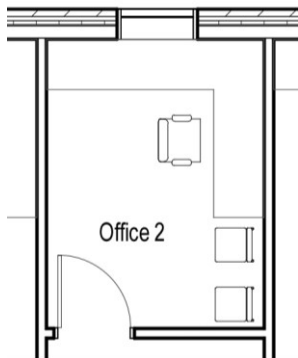
Mechanical/ HVAC/ Piping Requirements: See Section 4.G Mechanical Article

Electrical Requirements: See Section 4.G Electrical Article

Technology Requirements: See Section 4.C Technology Plan and Telecommuting Plan & Section 4.G Technology Article

Security Requirements: See Section 4.G Security Article

Room Layout Diagram: 1/8" = 1'-0"



Adjacency Layout Diagram: See Appendix 4c Adjacency Diagram

APPENDIX 4a – SPACE NEEDS INVENTORY

Room/ Space Name: Multi-purpose Room

Number of Spaces in program: 1

Square Foot Area: 600 sq. ft. (24 inmates x 25 sf/ per inmate)

Function: A room which can be transformed to accommodate multiple functions

Adjacencies: Multipurpose Storage, Inmate Toilet

Furniture, Fixtures, & Equipment: Chairs, Tables, & White Board

Architectural Finishes

Flooring: Carpet

Wall Material: Masonry

Ceiling: Acoustical Ceiling Tile

Lighting: LED Fixture

Wall Base: Vinyl

Wall Finish: Paint

Ceiling Height: 9'-0"

Special Criteria: N/A

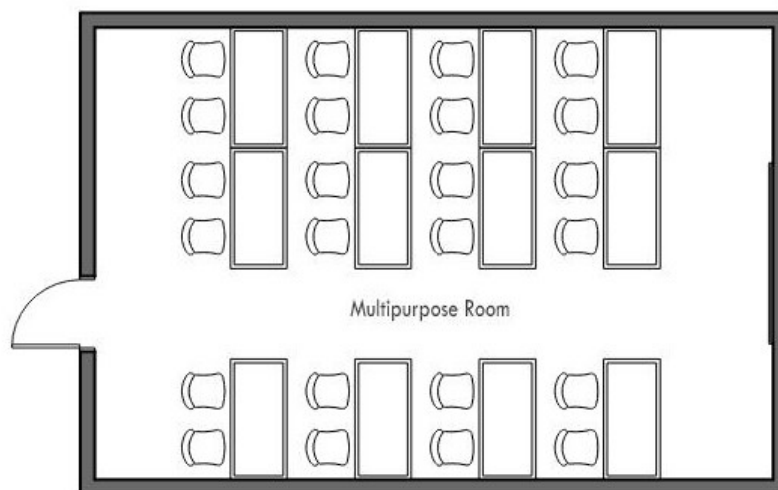
Mechanical/ HVAC/ Piping Requirements: See Section 4.G Mechanical Article

Electrical Requirements: See Section 4.G Electrical Article

Technology Requirements: See Section 4.C Technology Plan and Telecommuting Plan & Section 4.G Technology Article

Security Requirements: See Section 4.G Security Article

Room Layout Diagram: 1/8" = 1'-0"



Adjacency Layout Diagram: See Appendix 4c Adjacency Diagram

APPENDIX 4a – SPACE NEEDS INVENTORY

Room/ Space Name: Multipurpose Storage

Number of Spaces in program: 1

Square Foot Area: 60 sq. ft.

Function: Storage

Adjacencies: Multipurpose Room

Furniture, Fixtures, & Equipment: Shelving

Architectural Finishes

Flooring: Carpet

Wall Material: Masonry

Ceiling: Acoustical Ceiling Tile

Lighting: LED Fixture

Wall Base: Vinyl

Wall Finish: Paint

Ceiling Height: 9'-0"

Special Criteria: N/A

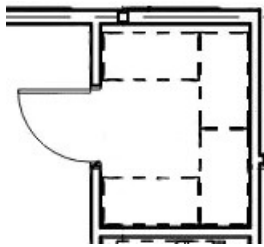
Mechanical/ HVAC/ Piping Requirements: See Section 4.G Mechanical Article

Electrical Requirements: See Section 4.G Electrical Article

Technology Requirements: See Section 4.C Technology Plan and Telecommuting Plan & Section 4.G Technology Article

Security Requirements: See Section 4.G Security Article

Room Layout Diagram: 1/8" = 1'-0"



Adjacency Layout Diagram: See Appendix 4c Adjacency Diagram

APPENDIX 4a – SPACE NEEDS INVENTORY

Room/ Space Name: Chapel

Number of Spaces in program: 1

Square Foot Area: 600 sq. ft. (24 inmates x 25 sf/ per inmate)

Function: Place of worship

Adjacencies: Chapel Storage & Inmate Toilet

Furniture, Fixtures, & Equipment: Chairs & podium

Architectural Finishes

Flooring: Carpet

Wall Material: Masonry

Ceiling: Acoustical Ceiling Tile

Lighting: LED Fixture

Wall Base: Vinyl

Wall Finish: Paint

Ceiling Height: 10'-0"

Special Criteria: N/A

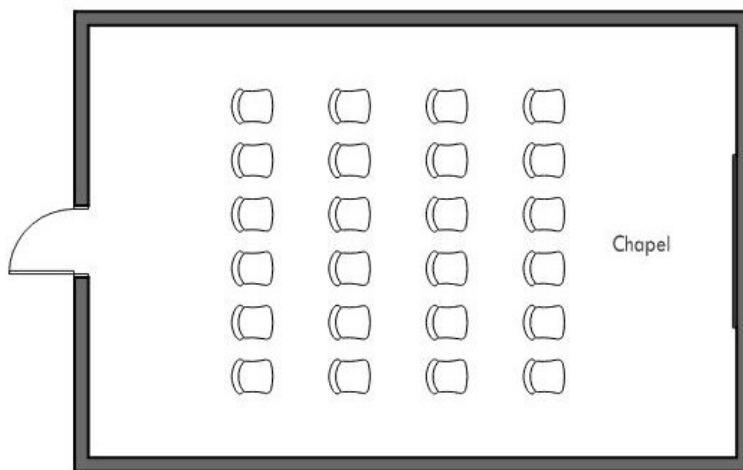
Mechanical/ HVAC/ Piping Requirements: See Section 4.G Mechanical Article

Electrical Requirements: See Section 4.G Electrical Article

Technology Requirements: See Section 4.C Technology Plan and Telecommuting Plan & Section 4.G Technology Article

Security Requirements: See Section 4.G Security Article

Room Layout Diagram: 1/8" = 1'-0"



Adjacency Layout Diagram: See Appendix 4c Adjacency Diagram

APPENDIX 4a – SPACE NEEDS INVENTORY

Room/ Space Name: Chapel Storage

Number of Spaces in program: 1

Square Foot Area: 30 sq. ft.

Function: Storage

Adjacencies: Chapel

Furniture, Fixtures, & Equipment: Shelving

Architectural Finishes

Flooring: Carpet

Wall Material: Masonry

Ceiling: Acoustical Ceiling Tile

Lighting: LED Fixture

Wall Base: Vinyl

Wall Finish: Paint

Ceiling Height: 9'-0"

Special Criteria: N/A

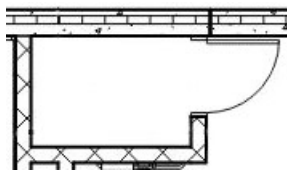
Mechanical/ HVAC/ Piping Requirements: See Section 4.G Mechanical Article

Electrical Requirements: See Section 4.G Electrical Article

Technology Requirements: See Section 4.C Technology Plan and Telecommuting Plan & Section 4.G Technology Article

Security Requirements: See Section 4.G Security Article

Room Layout Diagram: 1/8" = 1'-0"



Adjacency Layout Diagram: See Appendix 4c Adjacency Diagram

APPENDIX 4a – SPACE NEEDS INVENTORY

Room/ Space Name: Laundry

Number of Spaces in program: 1

Square Foot Area: 800 sq. ft.

Function: Laundry

Adjacencies: Inmate Toilet

Furniture, Fixtures, & Equipment: Commercial Washers (4), Commercial Dryers (4), laundry carts, folding counter, and chemical storage

Architectural Finishes

Flooring: Epoxy

Wall Material: Masonry

Ceiling: Acoustical Ceiling Tile

Lighting: LED Fixture

Wall Base: Vinyl

Wall Finish: Paint

Ceiling Height: 9'-0"

Special Criteria: N/A

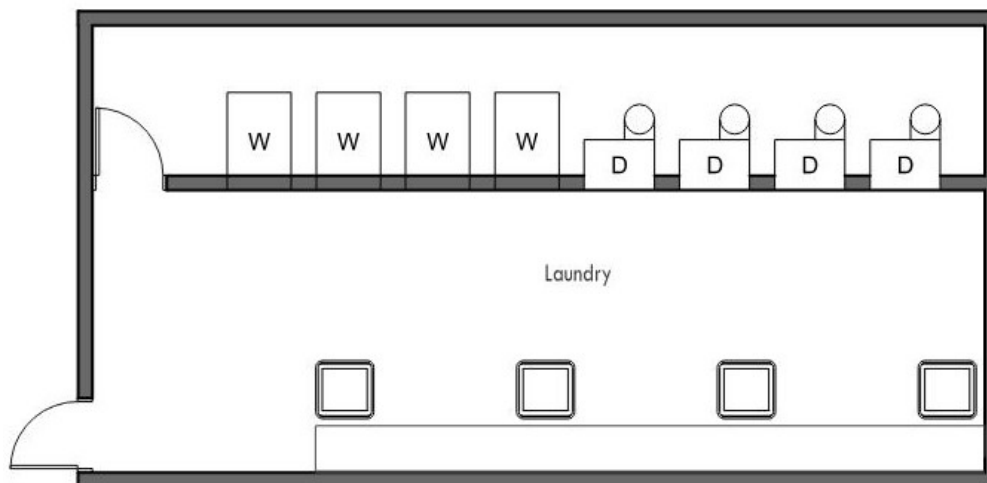
Mechanical/ HVAC/ Piping Requirements: See Section 4.G Mechanical Article

Electrical Requirements: See Section 4.G Electrical Article

Technology Requirements: See Section 4.C Technology Plan and Telecommuting Plan & Section 4.G Technology Article

Security Requirements: See Section 4.G Security Article

Room Layout Diagram: 1/8" = 1'-0"



Adjacency Layout Diagram: See Appendix 4c Adjacency Diagram

APPENDIX 4a – SPACE NEEDS INVENTORY

Room/ Space Name: IT Room

Number of Spaces in program: 1

Square Foot Area: 200 sq. ft.

Function: Storage for servers and all IT equipment

Adjacencies: Transition Office, Case Manager Office, & Lieutenant Office

Furniture, Fixtures, & Equipment: Desk, Chair, Servers, & AC unit

Architectural Finishes

Flooring: Carpet

Wall Material: Gypsum Board or Masonry

Ceiling: Acoustical Ceiling Tile

Lighting: LED Fixture

Wall Base: Vinyl

Wall Finish: Paint

Ceiling Height: 9'-0"

Special Criteria: N/A

Mechanical/ HVAC/ Piping Requirements: See Section 4.G Mechanical Article

Electrical Requirements: See Section 4.G Electrical Article

Technology Requirements: See Section 4.C Technology Plan and Telecommuting Plan & Section 4.G Technology Article

Security Requirements: See Section 4.G Security Article

Room Layout Diagram: 1/8" = 1'-0"



Adjacency Layout Diagram: See Appendix 4c Adjacency Diagram

APPENDIX 4a – SPACE NEEDS INVENTORY

Room/ Space Name: Staff Toilet – ADA Compliant

Number of Spaces in program: 1

Square Foot Area: 50 sq. ft.

Function: Toilet facility for staff

Adjacencies: Offices

Furniture, Fixtures, & Equipment: Wall Mounted ADA Toilet, Sink, Grab Bars, Toilet Paper Holder, Paper Towel Dispenser, & Mirror

Architectural Finishes

Flooring: Ceramic Tile

Wall Material: Cement Board

Ceiling: Abuse Resistant Gypsum Board

Lighting: LED Fixture

Wall Base: Ceramic Tile

Wall Finish: Ceramic Tile

Ceiling Height: 9'-0"

Special Criteria: N/A

Mechanical/ HVAC/ Piping Requirements: See Section 4.G Mechanical Article

Electrical Requirements: See Section 4.G Electrical Article

Technology Requirements: See Section 4.C Technology Plan and Telecommuting Plan & Section 4.G Technology Article

Security Requirements: See Section 4.G Security Article

Room Layout Diagram: 1/8" = 1'-0"



Adjacency Layout Diagram: See Appendix 4c Adjacency Diagram

APPENDIX 4a – SPACE NEEDS INVENTORY

Room/ Space Name: Inmate Toilet – ADA Compliant

Number of Spaces in program: 1

Square Foot Area: 50 sq. ft.

Function: Toilet facility for inmates

Adjacencies: Multipurpose Room, Chapel, & Laundry

Furniture, Fixtures, & Equipment: ADA Combi Unit, Grab Bars, Toilet Paper Holder, & ADA Mirror

Architectural Finishes

Flooring: Epoxy

Wall Material: Masonry

Ceiling: Abuse Resistant Gypsum Board

Lighting: LED Fixture

Wall Base: Paint

Wall Finish: Paint

Ceiling Height: 9'-0"

Special Criteria: N/A

Mechanical/ HVAC/ Piping Requirements: See Section 4.G Mechanical Article

Electrical Requirements: See Section 4.G Electrical Article

Technology Requirements: See Section 4.C Technology Plan and Telecommuting Plan & Section 4.G Technology Article

Security Requirements: See Section 4.G Security Article

Room Layout Diagram: 1/8" = 1'-0"



Adjacency Layout Diagram: See Appendix 4c Adjacency Diagram

SECTION 4 - APPENDIX 4b**APPLICABILITY OF STATUTES FOR PROJECTS RECEIVING STATE FUNDING**

STATUTE	RECIPIENT	REMARKS
	State Agency	
1. §16B.241 Coordinated Facility Planning	YES (required)	
2. §16B.32, Subd 1 Alternative Energy Sources if renovating 50 percent or more of an existing building or its energy systems	NO	Not required as we are not renovating 50 percent or more.
3. §16B.32, Subd 1a Renewable Energy Sources - 2% of energy use Solar or Wind-predesign must include analysis	YES	
4. §16B.32, Subd 2 Energy Conservation Goals	YES	
5. §16B.323 Solar Energy in State Buildings. Up to 5% of appropriation to be used on Solar energy system when doing substantial reconfiguration or replacement of energy systems	YES	
6. §16B.325: §16B.325: Apply Sustainable Guidelines (B3-MSBG) (http://www.b3mn.org/guidelines/index.html) §216B.241 Sustainable Building 2030 requirements Contact/support: http://www.b3mn.org/guidelines/index.html	YES New Bldgs, Addns & Major Renovations	
7. §16B.326 Written plan w/predesign to consider providing Geothermal & Solar Energy Heating & Cooling Systems on new or replacement HVAC systems	YES	
8. §16B.327 Recycle 50% of Construction & Demolition Waste (B3-MSBG requires 75%)	YES See #6, MSBG	Applicable as this project is more than \$5,000,000.
9. §16B.33 State Designer Selection Board	YES	Included in the overall schedule.
10. §16B.335, Subd 1, Notification to House & Senate Committees	YES	Project will be submitted.
11. §16B.335, Subd 3 Predesign Submittal See Statute for exempted projects	YES	Predesign performed.
12. §16B.335, Subd 4 Energy Conservation Standards (Energy Code - MN Rules 1322/1323 http://www.doli.state.mn.us/CCLD/Codes.asp)	YES	Included in design narratives. Extending existing services.
13. §16B.335, Subd 5 & 6 Review & letter by MN.IT	YES	Letter provided.
14. §16B.335, Subd. 3c. Consider the use of MINNCOR products www.minncor.com	YES	MINNCOR provided.
15. §16B.35 % for Art When considered in original legislative request; & when constn is \$500K or greater	YES	Included in cost estimate.
16. §177.42-44 Prevailing Wage Rates- Contractor must pay prevailing wages https://www.revisor.mn.gov/statutes/?id=177	YES	Included in cost estimate.
17. Laws 2014, Chapt 294, Sec 22 and Chapt 295, Sec 21 AMERICAN-MADE STEEL.	YES	Included in cost estimate.
18. §16A.633 Jobs Reporting. Must report to legislature on jobs created or retained as a result of capital project funding by the state.	YES	Will report as required.
19. §363A.44 Laws 2014, Chapt 239, Sec 6 Equal Pay (Women's Economic Security Act). Equal Pay Certificate from MDHR required on contracts over \$500K (prime and subs)	YES	Will provide in project.
20. §16C.285 Laws 2014, Chapt 253, Responsible Contractor	YES	Will include in project specifications.
21. §16A.695 Use / Grant Agreement	NO	
22. Appropriation Language	See appropriation.	See appropriation.

REFERENCE: Link to State Statutes: <https://www.revisor.leg.state.mn.us/pubs>

5. Site Analysis and Selection

Based on the selected option from the previous Study, and the fact that the existing building will be partially demolished and a replacement expansion constructed in its place, there was no site selection required.

The existing building, adjacent parking lots and recreation courts sit on approximately 4.5 acres.

SECTION 6.1 – CAPITAL EXPENDITURES

The total project cost shown in the *Agency Capital Budget Request*, includes all direct and associated costs for all activities and phases, including design, surveys, testing, construction, loose equipment, furniture and fixtures, commissioning, move-in, temporary relocations, environmental site analysis, and contingencies. The cost estimate was prepared by Cost, Planning & Management International, Inc, (CPMI) a professional cost estimating consultant.

SECTION 6.2 – ONGOING OPERATING EXPENDITURES

The staffing quantities remain the same as they currently are for the existing building. No cost decrease or increase is expected.

The utility cost savings are expected to be significant on the new addition compared to the old two-story uninsulated portion being demolished.

SECTION 6.3 – LIFE EXPECTANCY

The life expectancy of a steel structure and exterior steel stud and brick with garage and stairways as precast concrete varies between 25 - 50 years if properly maintained.

SECTION 6.4 – COMPARATIVE FINANCIAL ANALYSIS

Klein McCarthy Architects used the information developed in Predesign For 96-Bed Minimum Housing Unit at MCF – Red Wing, RECS Project No. 78RW0028 revised and issued October 27, 2017. To provide the same comparable 96-Bed minimum security housing facility, the Total Estimated Construction Cost was \$12,214,000 with an estimated Total Project Cost of \$16,199,000 (all costs associated with the project). The Project Cost inflated to the same midpoint of construction as MCF Faribault would be \$27,991,272.

Klein McCarthy Architects also used the information developed in Predesign For 96-Bed Minimum Housing Unit at MCF – Stillwater, RECS Project No. 78SW0048 revised and issued October 30, 2017. To provide the same comparable 96-Bed minimum security housing facility, the Total Estimated Construction Cost was \$10,928,000 with an estimated Total Project Cost of \$14,622,000 (all costs associated with the project). The Project Cost inflated to the same midpoint of construction as MCF Faribault would be \$25,266,276.

Both of the Predesigns at MCF Red Wing and MCF Shakopee contained similar characteristics of 96 beds, programs, and support for new precast constructed facilities. The largest difference was that they were new facilities compared to an addition and remodeling of the MCF Faribault facility at a Project Cost of \$7,987,468.

SECTION 6.5 – RISK MITIGATION

This project involves new construction, addition and renovations, and will include the following project quality control plan included in the project budget:

- Building Envelope Commissioning (Design reviews and construction commissioning and inspections during construction).
- HVAC and Electrical Systems Commissioning (Design reviews and construction commissioning and inspections during construction).
- MN Sustainable Building Guidelines (B3)
- Building Information Modeling (BIM) with interface of equipment with Archibus.

Identify all potential site related risks and the associated plan to mitigate them:

- Utility tunnel that enters the building under the existing portion to be demolished. This will be designed to allow the first-floor slab to remain in place with structural modifications so that the new expansion will build adjacent to it and over it so that the utility tunnel remains intact. The remaining tunnel will be protected and designed to be built over as to avoid damage.

Identify risks associated with the design and construction of the building:

- Current water infiltration will be mitigated with additional foundation waterproofing and drain tile system.
- The utility tunnel will be address as described above.

APPENDIX 6 – WORKSHEET FOR DESIGN AND OWNER COSTS

Item	Scope of Work	Fee/Cost
X	Basic Services -Architectural	\$0
X	Civil	Included in basic fee
	Landscape	N/A
X	Structural	Included in basic fee
X	MEP (Mechanical, Electrical, Plumbing)	Included in basic fee
X	Hazardous Material survey, design, air monitoring, abatement	\$75,000
X	Additional Services (See Section 4.J Quality Control Plan)	Included in basic fee
	1. Specialty Design: Security Design; Technology; Fire Protection	Included in basic fee
X	2. Interior & Furniture, Fixtures & Equipment (FF&E) bid package(s)	\$31,318
X	3. Minnesota Sustainable Building Guidelines & SB2030	Included
X	4. Building Information Modeling (BIM)	Included
	5. Move/Occupancy Consultant & Moving company	N/A
	6. Environmental Assessment Worksheet-Impact of selected site	N/A
X	7. Presentation model of building	Included in basic fee
X	8. Presentation Sketches of building	Included in basic fee
	9. Presentations to Legislature, Agency Management, others	N/A
	10. Exterior utility costs	N/A
OWNER COSTS (See Section 4.J Quality Control Plan)		
X	1. Owner's Project Representative (1 – 2% of construction)	\$0
X	2. CM at Risk Fees – Preconstruction and Project Fee	\$386,000
X	3. Other State Project Management Costs (0.75% of construction)	\$55,378
X	4. Construction costs auditor – (for CM-Risk & Design Build)	Included
X	5. Building Abatement Design and Removal (Renovation & Demo)	Included in Owner Contingency
X	6. Topographic (ALTA) Survey of selected site	Included in Owner Contingency
X	7. Geotechnical Investigation of selected site	Included in Owner Contingency
	8. Phase I and II Environmental Site Assessment (for contaminants)	N/A
	9. Environmental Assessment Worksheet-Impact Statement (if required)	N/A
X	10. HVAC and Electrical Systems Commissioning (B3 Requirement)	\$50,000
	11. Building Envelope Commissioning	N/A
X	12. Construction Testing and curtainwall testing services	Included in Construction Cost
X	13. Permit Costs	Included in Construction Cost
X	14. Sewer Access Cost (SAC) and Water Access Cost (WAC)	\$150,000
	15. Wetlands Delineation and (Design & Mitigation)	N/A
	16. Utility Service Upgrades (Water, sewer, gas, electric) & Const'n	N/A
	17. Traffic Studies	N/A
	18. Historic Structures Report (Historic Preservation Consultant fee)	N/A

APPENDIX 6a: Project Cost Form

Project Costs								
Entity:	Corrections							
Project Name:	MCF-Faribault - Dakota Building Renovation							
Date of Estimate:								
Project Cost Category (Dollars in Thousands)	Prior Year 2020	Prior Year 2021	Total All Prior Years	Request Year 2022	Request Year 2024	Request Year 2026	Request Total	Project Total
Fiscal Years (FY)	(7/1/19-6/30/20)	(7/1/20-6/30/21)	to 6/30/21	(7/1/21-6/30/23)	(7/1/23-6/30/25)	(7/1/25-6/30/27)		
Acquisition of Land, Land Easements, Options	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Property Acquisition Subtotal			\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Predesign Fees	\$ -	\$ -	\$ -	\$ -				\$ -
Predesign Fees Subtotal			\$ -					\$ -
Schematic Design				\$ -				\$ -
Design Development				\$ -				\$ -
Contract Documents				\$ -				\$ -
Construction Administration				\$ -				\$ -
Include Post Construction above				\$ -				\$ -
Other Design Costs				\$ -				\$ -
Include 5% Owner Contingency above				\$ -				\$ -
Design Fees Subtotal				\$ -				\$ -
State Staff Project Management				\$ 55,378				\$ 55,378
Non-State Project Management				\$ -				\$ -
Commissioning				\$ 50,000				\$ 50,000
Other Project Management Costs				\$ -				\$ -
Project Management Subtotal				\$ 105,378				\$ 105,378
Site and Building Preparation				\$ 244,000				\$ 244,000
Demolition and Decommissioning				\$ 82,000				\$ 82,000
Construction				\$ 4,552,000				\$ 4,552,000
Includes CM fee of 5% in above				\$ 386,000				\$ 386,000
Infrastructure/Roads/Utilities				\$ 576,000				\$ 576,000
Hazardous Materials Abatement				\$ 75,000				\$ 75,000
Testing				\$ -				\$ -
Construction Contingency				\$ 463,400				\$ 463,400
Other Construction Costs				\$ 150,000				\$ 150,000
Construction Subtotal				\$ 6,528,400				\$ 6,528,400
Relocation Expenses				\$ -				\$ -
Relocation Expenses Subtotal				\$ -				\$ -
One Percent for Art				\$ -				\$ -
One Percent for Art Subtotal				\$ -				\$ -
Furniture, Fixtures & Equipment				\$ 31,318				\$ 31,318
Telecommunications Voice & Data				\$ -				\$ -
Security Equipment				\$ -				\$ -
Other Occupancy Costs				\$ -				\$ -
Occupancy Costs Subtotal				\$ 31,318				\$ 31,318
Sub-Total Project Costs			\$ -	\$ 6,665,096	\$ -	\$ -	\$ -	\$ 6,665,096
Owner Contingency				\$ 738,372				\$ 738,372
Mid-Point of Construction:				Jul-23				
The Inflation Rate is:				10.7%				10.7%
Consultant Estimated Costs including Inflation using MMB factors at								
Predesign				\$ 584,000				\$ 584,000
Total Project Costs (Predesign)				\$ 1,322,372				\$ 1,322,372
System Calculated Inflation								
Inflation Costs Included in Request								
Inflationary Adjustment								
Total Project Costs (per MMB)			\$ -	\$ 7,987,468	\$ -	\$ -	\$ -	\$ 7,987,468
Total Funding Sources Related to the Request								\$ 7,987,468
Costs less Funding								\$ (0)
Comments on Project Costs								
IT Costs								
Operating Budget Impact (\$)								
Operating Budget Impact (FTE)								
System Calculated Contingency								
Contingency Included in Request								
Contingency Difference								
Comments on Contingency								

APPENDIX 6b: Construction Costs Form

CAPITAL BUDGET REQUEST

CONSTRUCTION COSTS FORM

CONSTRUCTION TYPE OF SPACE (Office, Lab, Ramp, etc.)	EXISTING	NEW CONSTRUCTION			REMODELING			RENEWAL (Asset Preservation)			TOTAL COST (in \$000)
		Gross Sq. Feet	Cost (in \$000)	Cost Per Sq. Foot (in \$)	Gross Sq. Feet	Cost (in \$000)	Cost Per Sq. Foot (in \$)	Gross Sq. Feet	Cost (in \$000)	Cost Per Sq. Foot (in \$)	
Programs/Classrooms		4,383	2,091	477							2,091
Housing and support					19,438	3,039	156				3,039
TOTAL			2,091	477		3,039	156		0	0	5,130

This form is for Reporting and Analysis of Construction Costs only.

No other cost items from the Project Cost Form should be included on this form.

APPENDIX 6c: Operating Cost Form

CAPITAL BUDGET REQUEST

OPERATING COSTS FORM

CHANGES IN STATE OPERATING COSTS	Current Cost	Projected Cost (Without Inflation)			
	F. Y. 2018	F.Y. 7/1/18 - 6/30/20	F.Y. 2021-22	F.Y. 2023-24	F.Y. 2025-26
Compensation (Program and Building Operation)	\$ 1,116,000	\$ 2,230,000	\$ 2,530,000	\$ 2,594,000	\$ 2,658,000
Expenses - Food Service					
Food					
Compensation					
GPS					
Support	\$ 250,000	\$ 540,000	\$ 785,000	\$ 785,000	\$ 785,000
Building Operating Expenses (Utilities)	\$ 90,000	\$ 188,000	\$ 189,000	\$ 195,000	\$ 195,000
State-Owned Lease Expenses	\$ -	\$ -	\$ -	\$ -	\$ -
Nonstate-Owned Lease Expenses	\$ -	\$ -	\$ -	\$ -	\$ -
Other Expenses:					
Insurance**				\$ N/A	
Initial Furnishings				\$ 32,280	
Revenue Offsets					
TOTAL	\$ 1,456,000	\$ 2,958,000	\$ 3,504,000	\$ 3,606,280	\$ 3,638,000
No. of FTE* Personnel	13.5	13.5	13.5	13.5	13.5

*FTE = Full Time Equivalent - No additional staff is added

** Agency is billed as a total, not by building therefore insurance information is not applicable

No additional operating costs are increased over current costs

SCHEDULE

Site Acquisition:	None required
Project Funding:	July 2022
Bidding:	July – August 2022
Award Negotiation:	September – October 2022
Construction:	November 2022 – May 2024
Mid-point of Construction:	July 2023
Close-Out:	June 2024
Occupancy:	July 2024

PREDESIGN CHECKLIST

1. Minnesota Statute §16B.335 Subdivision 3 requires submittal of a Predesign Document to the Commissioner of Administration on proposed projects that have a construction cost of \$750,000 or greater (\$1,500,000 for a local government project) when State money (of any amount) is used on the project.
2. When an appropriation is made for a major construction project, Minnesota Statute §16B.335 Subdivision 1 further requires that you not prepare final plans (construction documents) until you present the program plan and cost estimates for all elements necessary to complete the project to the Chair of the Senate Finance Committee and the Chair of the House Ways and Means Committee, and they have made their recommendations and the Chair of the House Capital Investment Committee is notified.

COMPLETE THE CHECKLIST AND ATTACH WITH THIS SECTION.

PREDESIGN CHECKLIST - continued

Complete N/A

- | | | |
|-------------------------------------|--------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1. Review the Contents of a <i>Predesign Submittal</i> in the State's <i>Predesign Manual</i> .
weblink: http://mn.gov/admin/government/construction-projects/manuals-guidelines-forms/index.jsp |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 2. Structure the format of your Predesign submittal to contain the Components of Predesign. Include component tabs to readily identify and access each component. The components are: <ul style="list-style-type: none">a. Predesign Summary Statementb. Basis for Need – Project Backgroundc. Agency/Organization Planningd. Project Description<ul style="list-style-type: none">1. Architectural/Engineering Program2. Precedent Studies3. Technology Plan4. Sustainability, Energy Conservation, and Carbon Emissions5. Operations and Maintenance Requirements6. Statute Requirements7. Specialty Requirements8. Project Procurement and Delivery9. Quality Control Plane. Site Analysis and Selectionf. Financial Informationg. Schedule Information |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. <i>Section 1 – Predesign Summary Statement</i> . Work with the user agency to develop the executive summary. Be brief, with a two or three paragraph scope description of the project. Below the description include costs, funding sources and schedule. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. <i>Section 1 Predesign Summary Statement</i> : Complete the " <i>Building/Project Data Sheet</i> " to tabulate the pertinent data upon which the cost estimates are based. Include this sheet as a second page to the Section 1 – Predesign Summary Statement. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 5. <i>Section 1 Predesign Summary Statement</i> : If the project involves remodeling of an existing building, use the " <i>Building Audit Sheet</i> " to perform an audit/survey of the building's major components, systems and their conditions. Use and amend the " <i>Building/Project Data Sheet</i> " to indicate the scope of work for the proposed project. Insert behind the Summary Statement. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 6. <i>Section 2 Basis For Need-Project Background</i> : Gather the Section 3 planning information from the Agency/Organization and synthesize it into the format shown in the example. Detailing the Mission, Strategic Plan, Operational Plan and Basis for Need for the project. At the back of this include any additional background information on the project from your work with the agency. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 7. <i>Section 2 Basis For Need-Project Background</i> : Verify that the scope of the predesign complies with the language of the appropriation. (For projects that have already received a legislative appropriation.) |

PREDESIGN CHECKLIST - continuedComplete N/A

- | | | |
|-------------------------------------|--------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <p>8. Section 3 Agency/Organization Planning: This Section supports the <i>Basis for Need-Project Background</i>. Obtain the following from the user agency/organization:</p> <ul style="list-style-type: none">a. Planning documents such as org charts, mission statement,b. Strategic plan, andc. Operational plan for the project. <p>This information would include any supporting data, analysis or studies which support the proposed project and demonstrates the need for the project by linking it to the agency's mission, strategic and operational plans; which, in turn were used to prepare Section 2.</p> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <p>9. Section 3 Agency/Organization Planning: Included a list and narrative regarding the stakeholders involved and affected by the project (i.e. other agencies, organizations, and entities). Also include issues that remain to be resolved among stakeholders along with budget and schedule impacts upon the project.</p> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <p>10. Section 3 Agency/Organization Planning: Impacts on Operations, Budget and Facility Staff are detailed.</p> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <p>11. Section 4.A Architectural /Engineering Program: (For State Agency projects) Obtain and coordinate space planning standards with the Department of Administration. Then, include a review sign-off from The Department of Administration's Real Estate and Construction Services Division. Focus on job related functional needs and the State's <i>Space Guidelines</i> when developing the square foot areas of spaces. (Space Guidelines are located at http://mn.gov/admin/government/construction-projects/).</p> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <p>12. Section 4.A Architectural/Engineering Program. Work with the user/owner to develop the space program. Employ a participatory programming methodology similar to the example) to analyze operations and activities.</p> <ul style="list-style-type: none">a. Your methodology should consider Post-Occupancy Evaluation (POE). |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <p>13. Section 4.A Architectural/Engineering Program.: Complete the <i>Space Needs Inventory</i> sheet for each room of the project. Include these sheets in the predesign document. The Space Needs sheet should also identify special Mechanical or Electrical needs or upgrades for the space. For instance, you would state the need for special humidification for wood instrument storage in a music classroom.</p> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <p>14. Section 4.A Architectural/Engineering Program.: Prepare and include a detailed architectural space program with a Table of Spaces and their respective areas (square footages) with a total of assignable and gross square feet.</p> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | <p>15. Section 4.A Architectural/Engineering Program.: Provide adjacency diagrams of all spaces and a diagrammatic/conceptual layout of spaces. Superimpose these diagrams onto the Site Plan to show building/site fit and site relationships.</p> |

PREDESIGN CHECKLIST - continued

Complete N/A

- | | | |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 16. Section 4.A Architectural/Engineering Program.: On state agency projects, identify potential MINNCOR Industries www.minncor.com and Minnesota State Industries products http://stateindustries.org for the project. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 17. Section 4.A Architectural/Engineering Program. (for State Agency Projects): If applicable to the agency, work with the user agency to incorporate a <i>Telecommuting Plan</i> for this project. Include the <i>Telecommuting Plan</i> with the Predesign submittal document. Obtain review & response letter from MN.IT. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 18. Section 4.A Architectural/Engineering Program. Develop the Furniture, Fixtures and Equipment (FF&E) needs and include the associated costs as a line item in the project cost estimate. Consider Interior/Exterior Signage Exterior landscaping and fixtures, Telecommunication devices, Security Camera System, Lockers, Trash compactor, Window washing equipment, Phasing costs, and Moving costs. (Note: moving costs are not bondable.) |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 19. Section 4.B Precedent Studies: Research the project. Visit similar building types and include <i>precedent</i> projects into the predesign document and how the precedent affects the proposed project. Include information on the facilities (name, location, size, design features). Then indicate any features that will be incorporated into the proposed project. Special attention should be paid to design features that result in efficiency of program operations and ability to reduce long term operating costs. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 20. Section 4.C Technology Program (for State Agency Projects): Identify and document the technology needs for the project. Develop a Technology Plan for the project using the State's Technology agency (MN.IT) guidelines (" <i>Building Infrastructure Guidelines for State Owned Buildings</i> ") located at: http://mn.gov/admin/government/construction-projects/ . Technology plan is to be reviewed by MN.IT. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 21. Section 4.C Technology Plan (for State Agency Projects): Forward the Technology Plan to MN.IT (The State's Information Technology Agency) for review; and obtain a written letter from MN.IT. Incorporate any changes requested by MN.IT. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 22. Section 4.D Sustainability, Energy Conservation and Carbon Emissions: In accordance with Minnesota Statute §16B.235 identify Sustainable and High Performance goals for the project using " <i>The State of Minnesota Sustainable Building Guidelines</i> " at http://www.b3mn.org/guidelines/index.html . Include a summary table of goals & strategies. Also include the B3-MSBG project submittal report for the Predesign Phase that is generated by use of the B3-MSBG Tracking Tool at http://www.b3mn.org/guidelines/index.html . |

This requirement applies when the project is new building, addition, or major renovation. See the Applicability rules at the B3-MSBG website.

PREDESIGN CHECKLIST - continued

Complete N/A

- | | | |
|-------------------------------------|-------------------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 23. Section 4.D Sustainability, Energy Conservation and Carbon Emissions: Include a table of strategies to comply with Sustainable Building (SB) 2030 requirements. For SB2030 requirements, see: http://www.mn2030.umn.edu |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 24. For the Section 4.D Sustainability, Energy Conservation and Carbon Emissions: In accordance with MN Statute § 16B.32, identify alternative energy uses and associated systems. This applies to a new building or for a renovation of 50 percent or more of an existing building or its energy systems. Anticipate future designs which use active and passive solar energy systems, earth sheltered construction, and other alternative energy sources where feasible. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 25. Section 4.D Sustainability, Energy Conservation and Carbon Emissions: When the project is for a State Agency, provide a cost-benefit analysis for:
a. including alternative energy (wind and/or solar) sources to provide 2% of the proposed building's energy consumption. An example of an analysis is located at: http://mn.gov/admin/business/vendor-info/construction-projects/Guidelines/predesign.jsp
b. a 40 Kw "Made in Minnesota" photovoltaic solar system. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 26. Section 4.D Sustainability, Energy Conservation and Carbon Emissions: For compliance with MN Statute 16B.326, provide a written plan in the predesign to consider providing Geothermal and Solar Energy Heating & Cooling Systems on new or replacement HVAC systems. An example of an analysis is located at the weblink above. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 27. Section 4.D Sustainability, Energy Conservation and Carbon Emissions: Include a narrative in the predesign that the project specifications are to include requirements for the contractor to submit a "Waste Management and Recycling Program Plan" for both demolition and construction. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 28. Section 4.D Sustainability, Energy Conservation and Carbon Emissions: Estimated yearly energy consumption and associated costs are included. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 29. Section 4.E Operations and Maintenance Requirements: Conduct information gathering and program meetings with operations and maintenance staff. Document and include these needs into the predesign. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 30. Section 4.E Operations and Maintenance Requirements: For Projects located on the Capitol Complex, obtain "Plant Management Preferred Equipment List", "Capitol Complex Guidelines", and "Signage Guidelines". (available at http://mn.gov/admin/government/construction-projects/manuals-guidelines-forms/index.jsp). Include these documents in the Predesign document as instructions for the future design team. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 31. Section 4.F Statute Requirements: See Appendix 4c for statute requirements related to all projects receiving any amount of state funding. Enter information on how the project will comply with each statute and include in the final predesign document. |

PREDESIGN CHECKLIST - continued

Complete N/A

- | | | |
|-------------------------------------|--------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 32. Section 4.F Statute Requirements: Review the table of statutes contained in this manual. Identify the statutory requirements for the project. These are to be included in the final Predesign Document. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 33. Section 4.F Statute Requirements: Include any design requirements or other mandated requirements. <ul style="list-style-type: none">a. The statute that gives authority for the operational program.b. Licensing requirements. (i.e. Department of Health or other authority)c. Design requirements (i.e. American Correctional Association standards)d. Operating Standards (required State, Federal, & Industry standards)e. Federal Statutes/Laws/Requirementsf. Significant Building Code or land use/ zoning requirements |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 34. Section 4.G Specialty Requirements: Review the need to conduct a security and/or vulnerability assessment for the project. Include the study in the predesign document along with associated costs. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 35. Section 4.G Specialty Requirements: Include any unique requirements that are applicable to the specific project. i.e. performance requirements, unique testing requirements, environmental reports, assessments, impact statements, facility condition audits that may have been done, hazardous materials surveys, unique construction, restrictions. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 36. Section 4.G Specialty Requirements: For renovations and demolitions, verify if the building or structure or amenity is on the register of historic places and/or within a historic district. Meet with the State Historic Preservation Office (SHPO) to determine requirements. Include all SHPO requirements in the predesign as well as all specialty consultants (historic preservationist, archeologist) required for the future design team. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 37. Section 4.H Project Procurement and Delivery: Provide a written statement and recommendation of the proposed construction delivery method to be used on the project. Include the reasons for this selection. Options include: Design-Bid-Build, Best Value, Construction Manager at Risk, Design-Build. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 38. Section 4.I Project Design Services and other Owner Costs: Provide a listing of all costs that will be incurred in order to build the project. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 39. Section 4.J Quality Control Plan: Provide a listing of all quality control services and costs that are needed and will be incurred in order to building the project. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 40. Section 5 Site Analysis and Selection: Provide a narrative on why the preferred site was selected for the project based on the locations that best meet pre-identified site criteria. For State-owned buildings/State Agency projects, coordinate this effort with the Department of Administration, Real Estate and Construction Services. |

PREDESIGN CHECKLIST - continued

Complete N/A

- | | | |
|-------------------------------------|-------------------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 41. Section 5 Site Analysis and Selection: When locating or relocating or when proposing a new building or renovation, the Predesign Document must include an analysis of the agency's location(s) using "Criteria for Locating State Offices and Agencies" located at: http://mn.gov/admin/government/construction-projects/ |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 42. Section 5 Site Analysis and Selection: If the proposed project is a new building that will be in a campus setting (i.e. school, university, prison, extended care); review location options on the campus in regards to efficient operation and programs provided on the campus. (i.e. Agency masterplanning of a campus should occur in order to give direction as to future growth and organization - Note: Masterplanning is not a bondable activity.) |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 43. Section 5 Site Analysis and Selection: Verify if the project will be required to undergo a State Environmental Review. To determine this, go to: http://www.eqb.state.mn.us/EnvRevGuidanceDocuments.htm . If required the predesign will need to include all applicable information and direction to the future design team to provide assistance to the owner and responsible government unit in conducting an environmental assessment (EAW) and environmental impact statement (EIS).

Note: If the project includes federal dollars, determine the need to complete an Environmental Assessment in accordance with the National Environmental Protection Act (NEPA).

Include all applicable guidelines for EAWs and EISs into the predesign submittal document if available; if not include costs for these in the project budget. Identify required timelines in the project schedule. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 44. Section 6 Financial Information: Compile the project costs using the Department of Minnesota Management and Budget's <i>Capital Budget Request</i> spreadsheet form (this form is included in this manual). Complete this form and include it in the submitted Predesign document. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 45. Section 6 Financial Information: Compile the projected operating costs using the <i>State Operating Costs</i> form (this form is included in this manual). Other formats/forms are also acceptable. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 46. Section 6 Financial Information, review the Project Delivery Method (single prime, multiple prime, design/build) for impact on the <i>Cost Plan</i> for the project. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 47. Section 6 Financial Information, include design fees for special consultants in the project costs (i.e. food service, acoustical, security, etc.). |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 48. Section 6 Financial Information, verify existing utility infrastructures for adequate capacity needed to support the proposed building/facility or renovation. Incorporate costs for upgrades into the budget. |

PREDESIGN CHECKLIST - continued

Complete N/A

- | | | |
|-------------------------------------|-------------------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 49. Section 6 Financial Information: If applicable and/or desired, include percent for Art in the project cost. Statute 16B.35 Subdivision 1 applies [up to 1% of the appropriation can be allocated to art in public buildings – Detention facilities and non-public buildings are exempt.] |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 50. Section 6 Financial Information: Assist the user agency in identifying and incorporating contingency phasing and funding plans into the predesign to anticipate questions during legislative hearings. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 51. Section 6 Financial Information: When the proposed project is for an existing correctional facility, obtain the contractor security requirements for the facility and include appropriate cost and schedule adjustments. (Working in a secure facility will add approximately 15-20% cost to the project.) |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 52. Section 6 Financial Information: On major building projects, use the predesign to develop an option-based strategy for the agency to use in approaching the governor and legislature when requesting funding. The predesign should anticipate possible questions by presenting options for varying scopes and costs. Examples are: <ul style="list-style-type: none">a. It may make sense to break out options (and costs) to spread the funding over several capital bonding sessions.b. Phasing of the project. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 53. Section 6 Financial Information: For renovations, a Facility Condition Assessment has been conducted on the existing building and associated upgrade costs are included in the estimate. |
| <input type="checkbox"/> | <input checked="" type="checkbox"/> | 54. Section 6 Financial Information: Conduct an industrial hygiene investigation to determine if there are any hazardous material/asbestos abatement clean-up costs, fuel tank removal and/or contaminated soils clean-up costs for the proposed project or site. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 55. Section 6 Financial Information: Provide the Life Expectancy of the major building components and building as a whole and included in the predesign document. Show comparison costs of varying construction systems/components and their life span. Indicate the selected system that was used to prepare the cost estimates. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 56. Section 6 Financial Information (For State Agency projects): State's Design Guidelines were reviewed and associated costs accounted for. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 57. Section 7 Schedule Information: Include a schedule narrative and bar chart in the submittal document. Include time for hazardous material abatement, site clean-up, fuel tank removal and soils replacement costs, project schedule phasing time, relocation/move time, and any potential long-lead material deliveries. |

PREDESIGN CHECKLIST - continued

Complete N/A

- | | | |
|-------------------------------------|--------------------------|---|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 58. Section 7 Schedule Information: Include a quality control/coordination review of the construction documents by a third party. Include the cost of this in the design budget. Indicate a minimum of 2 months in the schedule for this review. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 59. For State Agency projects: Complete the Technology Checklist. Insert the MN.IT letter indicating they have reviewed and approved the Technology and Telecommuting Plans. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 60. This predesign document contains all the necessary requirements and costs for: <ul style="list-style-type: none">a. The owner to confidently pursue funding based on the cost estimates contained.b. The owner to advertise for design services and structure their contract with a design firm as to the design scope of work and fee; and,c. The future design team for all project requirements in order to carry out the proposed design.d. All owner costs required to deliver the proposed project. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 61. Include the SIGNATURE sheet, with signature of the ARCHITECT (see page 1). |

PREDESIGN CHECKLIST – continued
TECHNOLOGY & TELECOMMUNICATIONS
Complete N/A

- | | | |
|-------------------------------------|--------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 1. Obtain a copy of MN.IT's " <i>Building Infrastructure Guidelines For State-Owned Buildings</i> " and review the requirements for costs to be included in the project. For future design use, should the project be funded, include the Technology Plan and guidelines in the predesign submittal. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 2. In coordination with MN.IT, determine the need for and develop a Technology & Telecommunications Plan for the project. Form and convene a Predesign meeting to determine the agency's technology needs, goals, timelines and objectives. The Predesign Team will consist of, but will not be limited to: <ul style="list-style-type: none">-- Agency/customer-- Real Estate and Construction Services' (RECS) Project Manager-- Telecommunications Analyst (S)/Designer (if required for predesign) <p style="margin-left: 40px;">Note: The State's (RECS) Project Manager will provide the MN.IT contact name.</p> |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 3. For remodeling projects, verify existing technology infrastructures for adequate capacity. Include upgrade costs in the Cost Estimate. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 4. Identify the user agency's short and long range plans for technology needs. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 5. Identify if the project is or will be a single building or campus configuration. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 6. Identify existing distribution rooms and their capacity. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 7. Identify requirements for new distribution rooms. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 8. Identify Fiber Optic requirements, existing locations, new fiber lines. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 9. Identify copper-wiring requirements, existing and new. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 10. If information technology work is to be within an existing building, identify existing conditions; i.e. floor & ceiling heights & conditions, piping and duct conditions, water problems, feeder cable limitations, equipment room limitations. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 11. Identify existing telecommunications infrastructure service to the building. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 12. Identify types of existing cable trays and requirements for new cable trays. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 13. For projects in existing buildings, identify available communications "pairs" coming into the building. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 14. Identify MPOP (Main Point of Presence), APOP (Alternate Point of Presence), Internet Point of Presence locations and needs. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 15. Forward a copy of the project Technology Plan and Telecommuting Plan to MN.IT. |

PREDESIGN CHECKLIST – continued
TECHNOLOGY & TELECOMMUNICATIONS
Complete N/A

- | | | |
|-------------------------------------|--------------------------|--|
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 16. Obtain a written letter from MN.IT indicating acceptance of the Technology Plan and Telecommuting Plan for the project. Incorporate MN.IT's letter into the Predesign Document. |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 17. Incorporate any changes into the Technology Plan as requested by MN.IT (resulting from review of agency's technology plan for the project). |
| <input checked="" type="checkbox"/> | <input type="checkbox"/> | 18. Verify existing utility infrastructures for adequate capacity and cost upgrades needed to support the proposed building/facility or renovation. |

PREDESIGN CHECKLIST

Check off the above items as they are completed and include this checklist with your final submittal document. Completion of this checklist is **MANDATORY**.

CONSULTANT SIGNATURE:



Signature:

Printed Name: Scott W. Fettig, AIA

Title: President

Company: Klein McCarthy & Co., Ltd.

Name of Project: Predesign for the Dakota Building at MCF Faribault

Agency: Minnesota Department of Administration

Facility: MCF Faribault

State Project No.: 78FA0078

Sample Predesign Submittal Cover Letter

LETTERHEAD

October 13, 2021

Commissioner _____ [insert name of Commissioner of Administration]
c/o Bee Yang
Real Estate and Construction Services
309 Administration Building
50 Sherburne Avenue
St. Paul, MN 55155

Dear Commissioner _____,

RE: Predesign Submittal for the Dakota Building at MCF Faribault

In accordance with Minnesota Statutes §16B.335, Subdivision 3, enclosed you will find the Predesign submittal document for the 96-Bed Housing Unit at MCF Faribault in Faribault, MN. This predesign outlines the Department of Corrections' capital budget request for the 2020 state legislative session.

The project will include the building demolition of the dilapidated masonry 3,249 GSF two-story portion of the building in its entirety and construct a new single-story structure of 4,383 GSF to provide for replacement of spaces based on the spatial program included in the report. This will provide for the facility's needs and to meet current inmate programming, Americans with Disabilities Act (ADA), American Correctional Association (ACA) standards and technology advancements.

The total project cost is estimated to be \$7,987,468. This proposal seeks full funding in the amount of \$7,987,468.

Sincerely,

[insert Commissioner/Authority Name]
[or head of political subdivision or other approving authority]

Enclosure

cc:

The MCF Faribault Dakota Building budget was prepared by Cost, Planning & Management International, Inc. (CPMI), a professional cost estimating consultant, and is included on the following pages.

**PRE-DESIGN
COST MANAGEMENT REPORT
DAKOTA BUILDING STUDY
MINNESOTA CORRECTIONAL FACILITY – FARIBAULT
FARIBAULT, MINNESOTA
14 OCTOBER 2021**

PREPARED FOR:

**KLEIN McCARTHY ARCHITECTS
ST. LOUIS PARK, MINNESOTA**

PREPARED BY:

**COST, PLANNING AND MANAGEMENT INTERNATIONAL, INC.
EAGAN, MN • WEST DES MOINES, IA**

**PRE-DESIGN
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MINNESOTA CORRECTIONAL FACILITY – FARIBAULT
FARIBAULT, MINNESOTA
14 OCTOBER 2021**

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**PRE-DESIGN
COST MANAGEMENT REPORT
DAKOTA BUILDING STUDY
MINNESOTA CORRECTIONAL FACILITY – FARIBAULT
FARIBAULT, MINNESOTA
14 OCTOBER 2021**

BASIC ASSUMPTIONS

This Predesign Cost Management Report is based on information and drawings provided by Klein McCarthy Architects and received by CPMI on May 24th, through October 10th, 2019. The level of detail and accuracy of pricing in this estimate is consistent with the degree of completeness of the documents used for

Assumptions applied to this estimate include, but are not limited to:

- **Project Delivery Method**

This project will be procured by a Construction Manager at Risk (CMaR) project delivery method.

- **Design Contingency**

An allowance for undeveloped design and specification detail is included in this estimate and added to each summary. As the design is further developed, this contingency will decrease in value and the cost associated with the design details will be incorporated into the itemized portion of the estimate. This contingency also includes cost engineering accuracies related to document interpretation.

- **Project Conditions**

This estimate is based on areas of the building being occupied and operational during the remodeling portion of construction. Construction will be performed in specific phases.

- **Bid Conditions**

This estimate is based on a competitive bid environment (minimum of 3 bidders) for all items of subcontracted work. It is also based on a minimum of three bids being received from general contractors. It is assumed prospective bidders will not be pre-qualified to bid on this project.

- **Construction Schedule**

	START	MIDPOINT	FINISH	DURATION
Construction	Nov 2022	July 2023	May 2024	20 Months

- **Escalation**

Unit costs included herein are reflective of current costs with no escalation included. A labor and material escalation factor based on the above mentioned schedule is included on each option.

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DAKOTA BUILDING STUDY
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BASIC ASSUMPTIONS

- **Items Excluded From This Estimate**

Items which are not in the detail of this report include, but are not limited to:

- Overtime or shift work.
- Provisions for liquidated or actual damages.

- **Non-Building Items Considered To Be Included In This Estimate**

Items which are considered to be covered in the non-building costs include, but are not limited to:

- Professional design and consulting fees.
- Hazardous materials remediation.
- Construction contingency.
- Third-party building commissioning costs.
- Testing and inspections.
- Owner furnished and installed furniture, fixtures and equipment.
- Provisions for SAC or WAC charges and/or fees.

- **Items Affecting The Cost Estimate**

Items which may have an impact on the estimated construction cost include, but are not limited to:

- Modifications to the scope of work included in this estimate.
- Unforeseen sub-surface soil conditions.
- Restrictive technical specifications or excessive contract conditions.
- Construction period other than defined in this report.
- Any specified item of equipment, material or product that cannot be obtained from at least three different sources.

- **Estimate Objective**

This estimate is intended to be used as a tool for decision making and managing construction costs during the design phase of the project. It is prepared using industry contacts, experience, and the best judgment of a professional consultant. This estimate is intended to reflect an amount close to what would be the low bid of the project with respect to the present level of design and documentation along with consideration given to the current market conditions. CPMI has no control over market conditions, wage rates, or any contractor's method of determining prices or quantities. Therefore, CPMI cannot and does not guarantee this estimate will not vary from the actual bid.

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RECAP

DESCRIPTION	GSF	\$/GSF	TOTAL \$ AMOUNT
SUMMARY Demolish two-story building and replace with a new addition 50% larger than area of demolition.			
Existing Remodeled:	19,438	\$156.34	\$3,039,000
New Addition:	4,383	\$477.07	\$2,091,000
Sitework:			\$908,000
TOTAL CONSTRUCTION COST	23,821	\$253.47	\$6,038,000
Non-Building Costs:	23,821	\$126.74	\$3,019,000
TOTAL PROJECT COST	23,821	\$380.21	\$9,057,000

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UNIT COSTS

DESCRIPTION	QUANTITY	UNIT COST	TOTAL \$ AMOUNT
-------------	----------	--------------	--------------------

Demolish the two story masonry building in it's entirety and construct a new single story structure (square footage to be 50% larger than what is demolished) to provide for replacement and to meet ADA, ACA and IT advancements. The existing single story building to have the roof, brick, windows, etc., evaluated and priced as an asset preservation effort.

TWO-STORY BUILDING

Building Demolition

Demolish Building Including Foundations	3,249 SF	21.99	71,431
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ONE-STORY BUILDING

Code Compliance

Provide Floor Drains @ Kitchen Per Code	3 EA	5,129.95	15,390
Replace Shower Sanitary Piping to Achieve Code Required Slope	12 EA	4,397.10	52,765
Replace HVAC Controls - Quote	1 EA	107,728.95	107,729
Add Floor Leveler @ Door for ADA	1 LS	2,198.55	2,199

Building Exterior

Foundation Earthwork - Cut & Fill	1,147 CY	36.64	42,017
Clean & Repair Cracks & Waterproof Perimeter Drainage System	5,160 SF	18.32	94,538
Trench Excavation	1,030 LF	13.19	13,587
Drain Tile	1,030 LF	8.79	9,058
Granular Backfill	860 CY	36.64	31,513
Replace Stoops	6 EA	3,664.25	21,986
Replace Sidewalk	165 SF	14.66	2,418
Replace Bituminous Pavement	6 SY	80.61	484
Turf Restoration	11,500 SF	0.73	8,428
Wall Insulation @ Exercise Area	250 SF	2.93	733
Clean Exterior of Building	11,180 SF	3.66	40,966
Tuckpointing - 20% of Exterior Area	2,236 SF	6.60	14,748
Replace Stone as Needed - Allowance	1 LS	10,992.75	10,993
Replace Concrete Ramp Walls - Allowance	1 LS	14,657.00	14,657
Replace Steel Pipe Guardrails	20 LF	175.88	3,518
Remove & Replace Windows - Historically Correct	2,795 SF	183.21	512,079
Remove & Replace Doors - Historically Correct	6 EA	5,862.80	35,177
Replace Windows @ Exercise Area	450 SF	175.88	79,148

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UNIT COSTS

DESCRIPTION	QUANTITY	UNIT COST	TOTAL \$ AMOUNT
Demolish the two story masonry building in it's entirety and construct a new single story structure (square footage to be 50% larger than what is demolished) to provide for replacement and to meet ADA, ACA and IT advancements. The existing single story building to have the roof, brick, windows, etc., evaluated and priced as an asset preservation effort.			
ONE-STORY BUILDING			
Roofing			
Remove & Replace Asphalt Shingles Incl Underlayment	19,438 SF	16.12	313,393
Add Roof Insul @ Exercise Area	900 SF	4.40	3,957
Remove & Replace Soffit/Fascia/Trim	800 LF	43.97	35,177
Replace Gutters & Downspouts	300 LF	21.99	6,596
Interiors			
Replace Acoustical Ceilings	12,177 SF	7.33	89,239
Paint Gyp Board Ceilings	2,402 SF	1.47	3,521
Paint Interior Walls	18,000 SF	1.25	22,425
Paint Doors & Frames	40 EA	219.86	8,794
Replace VCT Flooring	10,275 SF	6.96	71,535
Remodel Area for Laundry	260 SF	146.57	38,108
Revise Lighting, Cameras & Sprinklers @ Exercise Area Roof Insulation	900 SF	10.99	9,893
Remodel Existing Offices Into New Intake Room, Strip Search Room & Locker Room	1,050 SF	139.24	146,204
Basement			
Underslab Drainage System			
Remove Basement Floor	12,000 SF	6.96	83,545
Drain Tile	720 LF	8.79	6,332
Granular Fill	50 CY	36.64	1,832
Sand Cushion	12,000 SF	0.37	4,397
Vapor Barrier	12,000 SF	0.22	2,638
New Basement Floor Slab	12,000 SF	12.82	153,899
Duplex Sump Pump & Basin	1 EA	10,992.75	10,993
Install Louvers & Increase Air Cirulation	1 LS	2,931.40	2,931
Add Concrete Slab Under Utility Routes	1 LS	7,328.50	7,329
Salvage Floor Structure Above Utility Piping	1 LS	1,465.70	1,466
VAV AHU For Ventilation/Dehumidification - 10,000 CFM	1 LS	80,613.50	80,614
Replace Piping Insulation	12,000 SF	2.56	30,780

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Demolish the two story masonry building in it's entirety and construct a new single story structure (square footage to be 50% larger than what is demolished) to provide for replacement and to meet ADA, ACA and IT advancements. The existing single story building to have the roof, brick, windows, etc., evaluated and priced as an asset preservation effort.			
ONE-STORY BUILDING			
HVAC			
Add HVAC @ Exercise Room	900 SF	73.29	<u>65,957</u>
SUBTOTAL			\$2,387,000
DESIGN/ESTIMATING CONTINGENCY - 15.0%			\$358,000
LABOR & MATERIAL ESCALATION (Midpoint Jul-2023) - 10.7%			<u>\$294,000</u>
TOTAL REMODEL CONSTRUCTION COST			\$3,039,000
NEW 1-STORY ADDITION			
New Construction			
Areas Include Classroom, Laundry & Circulation	4,383 SF	374.85	<u>1,642,980</u>
SUBTOTAL			\$1,643,000
DESIGN/ESTIMATING CONTINGENCY - 15.0%			\$246,000
LABOR & MATERIAL ESCALATION (Midpoint Jul-2023) - 10.7%			<u>\$202,000</u>
TOTAL NEW CONSTRUCTION COST			\$2,091,000

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Demolish the two story masonry building in it's entirety and construct a new single story structure (square footage to be 50% larger than what is demolished) to provide for replacement and to meet ADA, ACA and IT advancements. The existing single story building to have the roof, brick, windows, etc., evaluated and priced as an asset preservation effort.			
SITE			
Civil			
Erosion Control Allowance	1 LS	1,319.13	1,319
Remove Concrete Retaining Wall @ Sloped Ramps	230 SF	17.59	4,045
Remove Concrete Pavement @ Sloped Ramps	860 SF	4.40	3,782
Remove Sidewalk @ Sloped Ramps	440 SF	2.93	1,290
New ADA Code Compliant Sidewalk @ Sloped Ramps	830 SF	9.53	7,907
Compacted Backfill @ Removed Ramps	100 CY	36.64	3,664
Concrete Sidewalks	1,115 SF	9.53	10,623
7" Thick Concrete Valley Gutter	80 LF	117.26	9,380
Bituminous Pavement	2,800 SY	58.63	164,158
Finish Grade, Misc Site Restoration	1 LS	6,375.80	6,376
Site Utilities			
Construct Tunnel Under Addition for Campus Utilities	80 LF	4,030.68	322,454
New Campus Utility Piping & Cut-Over			
10" Steam	100 LF	549.64	54,964
5" Condensate	100 LF	403.07	40,307
3/4" Condensate	100 LF	87.94	8,794
5" Domestic Water	100 LF	403.07	40,307
3" Chilled Water Supply & Return	100 LF	256.50	25,650
Utility Allowance For Steam, Condensate, Hot & Cold Water	1 LS	7,328.50	7,329
Route Roof Downspouts Away From Bldg	1 LS	732.85	733
SUBTOTAL			\$713,000
DESIGN/ESTIMATING CONTINGENCY - 15.0%			\$107,000
LABOR & MATERIAL ESCALATION (Midpoint Jul-2023) - 10.7%			\$88,000
TOTAL NEW CONSTRUCTION COST			\$908,000